

Index of Subjects

A

- A23187**
inhibition of calcium effects on enzyme synthesis in
Dictyostelium: COUKELL AND CAMERON 649
- Acanthamoeba castellani**
importance of mitotic control in developmental competence:
JANTZEN, SCHULZE AND STOHR 715
- Acetabularia acetabulum**
vibrating electrode analysis of extracellular ion currents:
O'SHEA, GOODWIN AND RIDGE 503
- Acetylcholine receptors**
aggregates in rat myotubes, localization of actin: DANIELS
615
- Actin**
relationship to preprophase band and division site: MINEYUKI
AND PALEVITZ 283
role in megakaryocyte fragmentation: TABLIN, CASTRO AND
LEVEN 59
- Actin filaments**
architecture in PtK₂ cells: HANDEL, HENDRY AND
SHETERLINE 325
- Actin oligomers**
microinjection disrupts actin filament architecture in PtK₂
cells: HANDEL, HENDRY AND SHETERLINE 325
- Adherens junctions**
pan-cadherin antibodies used as markers for: GEIGER,
VOLBERG, GINSBERG, BITZUR, SABANAY AND HYNES 607
- Adhesiveness**
of EAT cells when co-cultured with fibroblasts or myocytes:
WOJCIAK AND KOROHODA 433
- Adrenal cells**
role of intermediate filaments in steroidogenesis: ALMAHBOBI
AND HALL 679
- Alanine:glyoxylate aminotransferases**
hepatic, subcellular distribution in mammalian species:
DANPURE, GUTTRIDGE, FRYER, JENNINGS, ALLSOP AND
PURDUE 669
- Allium**
relationship between preprophase band, F-actin and division
site: MINEYUKI AND PALEVITZ 283
- Alpha-factor**
initiates mating between fission yeast cells: DULIC AND
REIZMAN 517
- Amino acid uptake**
by melanoma cells: JARA, MARTINEZ-LIARTE, SOLANO AND
PENAFIEL 479
- Anaphase**
interzonal microtubules, dynamic during spindle elongation:
SHELDON AND WADSWORTH 273
- Anaphase B**
in kinetic analysis of, *in vitro*: BASKIN AND CANDE 79
- Antibodies**
in study of connexin43 in gap junctions in rat heart: LAIRD
AND REVEL 109
- Antimyosin**
in study of differential effects of myosin: ZUREK, SANGER,
SANGER AND JOCKUSCH 297
- Aspartyl phosphate**
cation-transporting ATPases of *Plasmodium*: MURAKAMI,
TANABE AND TAKADA 487
- Asymmetrical division**
in cytochalasin-treated *Allium* cells: MINEYUKI AND
PALEVITZ 283
- ATPase**
mechanochemical, in mitotic spindle elongation: BASKIN AND
CANDE 79

B

- Basal cells**
antibody markers of, in complex epithelia: PURKIS, STEEL,
MACKENZIE, NATHRATH, LEIGH AND LANE 39
- Blood-brain barrier**
dynamics of membrane recycling: RAUB AND AUDUS 127
- Bone resorption**
role of osteoclasts: BARON, NEFF, BROWN, LOUVARD AND
COURTOY 439
- Brain**
microvessel endothelial cells, dynamics of membrane
recycling: RAUB AND AUDUS 127
- Briza humilis**
chromosomes at meiotic metaphase I in heterozygotes: MOSS
AND MURRAY 565

C

- Cadherin**
in calcium-dependent intracellular adhesion: GEIGER,
VOLBERG, GINSBERG, BITZUR, SABANAY AND HYNES 607
- Calcification**
of retinal pericytes *in vitro*: SCHOR, ALLEN, CANFIELD, SLOAN
AND SCHOR 449
- Calcitonin**
inactivation of osteoclasts: BARON, NEFF, BROWN, LOUVARD
AND COURTOY 439
- Calcium**
in study of desmoplakin II expression: ANGST, NILLES AND
GREEN 247
switching, development of desmosomal adhesion after:
MATTEY, BURDGE AND GARROD 689
- Candida boidini**
induction of peroxisomes in: GOODMAN, TRAPP, HWANG AND
VEENHUIS 193
- Cardiac myocyte culture**
neurofilament proteins co-expressed with desmin: VITADELLO,
MATTEOLI AND GORZA 11
- Cartilage**
culture of human articular chondrocytes: ARCHER, McDOWELL,
BAYLISS, STEPHENS AND BENTLEY 361
pig articular, subpopulations of chondrocytes: HANDEL,
HENDRY AND SHETERLINE 325
- Ca²⁺-ATPase**
of rabbit skeletal muscle sarcoplasmic reticulum, homology
with *Plasmodium* protein: MURAKAMI, TANABE AND
TAKADA 487
- cdc2**
gene function in cell cycle: JOHN, SEK, CARMICHAEL AND
MCCURDY 627
- Cell adhesion**
and redistribution of membrane molecules: ANDRÉ, BENOLIEL,
CAPO, FOA, BUFERNE, BOYER, SCHMITT-VERHULST AND
BONGRANG 335
desmosomal, between MDCK cells after calcium switching:
MATTEY, BURDGE AND GARROD 691
participation of cadherens: GEIGER, VOLBERG, GINSBERG,
BITZUR, SABANAY AND HYNES 607
- Cell-cell adhesion**
proteins similar to desmosomal glycoproteins: HOLTEN,
KENNY, LEGAN, COLLINS, KEEN, SHARMA AND GARROD 239
- Cell culture**
of human epidermal keratinocytes, proliferation and
differentiation: JENSEN, ELGJO, LAERUM AND BOLUND 51
- Cell cycle**
control protein in wheat leaves: JOHN, SEK, CARMICHAEL AND
MCCURDY 627
duration in alga, *Scenedesmus quadricauda*: ZACHLEDER AND
SETLIK 631

Cell density
 high, of HL-60 cells, culture conditions: SCHUMPP AND SCHLAEGER 639

Cell differentiation
 in wheat leaves: JOHN, SEK, CARMICHAEL AND McCURDY 627

Cell division
 in early *Pelvetia* embryo: KROFF, MADDOCK AND GARD 545

Cell isolation
 of myogenic cells from biopsied muscle: JONES, MURPHY AND WATT 659

Cell plate
 positioning of insertion by preprophase bands: MINEYUKI AND GUNNING 527

Cell proliferation
 of Swiss 3T3 cells, effects of PDGF and insulin: BROOKS, HOWARD, LEAKE AND RIDDLE 71

Cell senescence
 of human diploid fibroblasts: KILL AND SHALL 473

Cell shape
 of EAT cells when co-cultured with fibroblasts or myocytes: WOJCIAK AND KOROHODA 433

Cell spreading
 of EAT cells when co-cultured with fibroblasts or myocytes: WOJCIAK AND KOROHODA 433
 of normal or Duchenne fibroblasts not consistently inhibited by monensin: BROWN, FISHER AND LUCY 149

Cell-to-cell interaction
 between EAT cells and fibroblasts or myocytes in culture: WOJCIAK AND KOROHODA 433

Cellular expression
 temporal changes in the developing kidney: FODDY, STAMATOGLU AND HUGHES 139

Centromere
 -associated protein identified in cultured mammalian cells: BALCZON, ACCAVITTI AND BRINKLEY 705

Centrosome
 antigen localized in intermediate filaments and mitotic spindle poles: BUENDIA, ANTONY, VERDE, BORNENS AND KARSENTI 259

Centrosomes
 cycle in early *Drosophila* embryo: CALLAINI AND RIPARBELLI 539

c-fos
 induction decreased by microgravity: DE GROOT, RIJKEN *et al.* 33

Chondrocytes
 human articular, *in vitro*, phenotypic modulation: ARCHER, McDOWELL, BAYLISS, STEPHENS AND BENTLEY 361
 subpopulations from pig articular cartilage: SICZKOWSKI AND WATT 349

Chondroitin sulphate
 modulation of native structure in tissue development and disease: CATERSON, MAHMOODIAN *et al.* 411

Chromosome positioning
 at meiotic metaphase in *Briza humilis* heterozygotes: MOSS AND MURRAY 565

Co-cultures
 of Ehrlich ascites cells with fibroblasts or myocytes, adhesiveness: WOJCIAK AND KOROHODA 433

Colon adenocarcinoma
 cell line HT29, effect of temperature: COHEN, OPHIR, HENIS, BACHER AND SHAUL 119

Confluency
 in characterization of ZO-1 protein in endothelial and other cell lines: LI AND POZNANSKY 231

Connexin43
 analysis in rat heart gap junction membranes: LAIRD AND REVEL 109

Constitutive
 expression of murine *mx1* gene: CHANG, GERLACH *et al.* 497

Cornea
 fibroblasts, pattern of metalloproteinase expression: FINI AND GIRARD 373

Crosslinking
 of tubulin to centromeres in cultured mammalian cells: BALCZON, ACCAVITTI AND BRINKLEY 705

Culture
 of human articular chondrocytes: ARCHER, McDOWELL, BAYLISS, STEPHENS AND BENTLEY 361

Cyclic nucleotide phosphodiesterase
 synthesis in *Dictyostelium* inhibited by calcium depletion: COUKELL AND CAMERON 649

Cytochalasin
 D-accelerated fragmentation of megacaryocytes in culture: TABLIN, CASTRO AND LEVEN 59
 -treated cells of *Allium*, relationships between PPB, F-actin and division site: MINEYUKI AND PALEVITZ 283

Cytokinesis
 in epitheloid cell sheets: ZUREK, SANGER, SANGER AND JOCKUSCH 297
 of *Tradescantia* stamen hair cells: MINEYUKI AND GUNNING 527

Cytoskeleton
 association in normal and RSV-transformed chick embryo fibroblasts: HORVATH AND KELLIE 307

Cytotoxic T lymphocytes
 conjugated with target cells, redistribution of membrane molecules: HANDEL, HENDRY AND SHETERLINE 325

D

Deletion mutants
 in study of assembly of intermediate filaments from keratin: HATZFELD AND WEBER 317

Desmin
 co-expressed with neurofilament proteins in heart conduction systems: VITADELLO, MATTEOLI AND GORZA 11

Desmoplakin
 II expression not restricted to stratified epithelia: ANGST, NILLES AND GREEN 247

Desmosomes
 adhesion between MDCK cells, development after switching: MATTEY, BURDGE AND GARROD 689
 glycoproteins similar to cell adhesion molecules: HOLTEN, KENNY, LEGAN, COLLINS, KEEN, SHARMA AND GARROD 239
 in study of desmoplakin II expression: ANGST, NILLES AND GREEN 247

Development
 competence in *Acetabularia*, importance of mitotic control: JANTZEN, SCHULZE AND STOHR 715
 ionic control, in *Acetabularia*: O'SHEA, GOODWIN AND RIDGE 503

Diatom spindle
 in study of mitotic spindle elongation: BASKIN AND CANDE 79

Dictyostelium
 calcium depletion inhibits cyclic nucleotide phosphodiesterase synthesis: COUKELL AND CAMERON 649

Differentiation
 of chick erythrocyte nuclei in heterokaryons: BERGMAN AND ENGERTZ 167
 of human epidermal keratinocytes in culture: JENSEN, ELGJO, LAERUM AND BOLUND 51
 of retinal pericytes: SCHOR, ALLEN, CANFIELD, SLOAN AND SCHOR 449

Division plane
 in cytochalasin-treated *Allium* cells: MINEYUKI AND PALEVITZ 283

DNA replication
 differs in extracts from eggs and oocytes of *Xenopus*: COX AND LENO 177
 nuclear, not necessary for mitochondrial growth and DNA synthesis in yeast: SAZER AND SHERWOOD 509

DNA synthesis
 supported by senescent human diploid fibroblasts: KILL AND SHALL 473

Drosophila
microtubule-nucleating sites, influence of taxol: MOGENSEN AND TUCKER 101

Drosophila embryo
centriole and centrosome cycle: CALLAINI AND RIPARBELLI 539

Duchenne fibroblasts
spreading not consistently inhibited by monensin: BROWN, FISHER AND LUCY 149

E

EGTA
inhibition in study of enzyme synthesis in *Dictyostelium*: COUKELL AND CAMERON 649

Ehrlich ascites cells
adherence and shape on contact with fibroblasts: WOJCIAK AND KOROHODA 433

Embryogenesis
in *Pelvetia*: KROFF, MADDOCK AND GARD 545

Embryonal carcinoma
PCC4uva differentiates into neurons more rapidly in presence of laminin: SWEENEY, OGLE AND LITTLE 23

end1
of *Saccharomyces cerevisiae* lacks functional vacuole needed for pheromone response: DULIC AND REIZMAN 517

Endocytosis
by cultured primary bovine brain microvessel endothelial cells: RAUB AND AUDUS 127
in elongating root cells of *Lobelia erinus*: SAMUELS AND BISALPUTRA 157

Endoplasmic reticulum
of rabbit skeletal muscle, Ca²⁺-ATPase homologous to *Plasmodium* protein: MURAKAMI, TANABE AND TAKADA 487

Endosomes
apical late, endocytic pathways convergence: FUJITA, REINHART AND NEUTRA 385

Endothelial cells
of brain microvessels, endocytosis and membrane recycling: RAUB AND AUDUS 127

Endothelial layer
characterization of the ZO-1 protein: LI AND POZNANSKY 231

Ephestia kuehniella
study of mitotic and meiotic spindles: WOLF 91

Epidermal peptides
in study of keratinocyte differentiation: JENSEN, ELGJO, LAERUM AND BOLUND 51

Epithelia
murine gene *Mx1* expression: CHANG, GERLACH *et al.* 497
stratified, antibody markers of basal cells: PURKISS, STEEL, MACKENZIE, NATHRATH, LEIGH AND LANE 39
stratified, desmoplakin II expression not limited to: ANGST, NILLES AND GREEN 247

Epithelial sheets
differential effects of myosin: ZUREK, SANGER, SANGER AND JOCKUSCH 297

Epithelium
endolytic pathways in endosomes in rat ileum: FUJITA, REINHART AND NEUTRA 385

Eryf1
-independent regulatory mechanisms for erythroid gene expression: BERGMAN AND ENGERTZ 167

Erythrocytes
nuclei of chick, gene expression pattern in heterokaryons: BERGMAN AND ENGERTZ 167

Extracellular ion currents
in *Acetobacter*, vibrating electrode analysis: O'SHEA, GOODWIN AND RIDGE 503

F

Fibroblasts
human, senescent, support DNA synthesis: KILL AND SHALL 473

Fibronectin
-binding proteins in rat liver and primary hepatocytes: STAMATOGLOU, SULLIVAN, JOHANSSON, BAYLEY, BURDETT AND HUGHES 59

Fission yeast
mitochondrial growth and DNA synthesis in absence of nuclear DNA replication: SAZER AND SHERWOOD 509

Flow cytometry
in study of mitochondrial growth and DNA synthesis in fission yeast: SAZER AND SHERWOOD 509

Fluorescence
photobleaching recovery, in study of effect of temperature on HT29 cells: COHEN, OPHIR, HENIS, BACHER AND SHAUL 119

Fluorescence microscopy
in study of cell adhesion and redistribution of membrane molecules: HANDEL, HENDRY AND SHETERLINE 325

G

Gap junctions
rat heart membrane, connexon43 study: LAIRD AND REVEL 109

Gene induction
by secreted peptide pheromones in yeast: DULIC AND REIZMAN 517

Genome organization
in bovine sperm nucleus: POWELL, CRAN, JENNINGS AND JONES 185

Glycoprotein
fibronectin-binding, in rat liver and primary hepatocytes: STAMATOGLOU, SULLIVAN, JOHANSSON, BAYLEY, BURDETT AND HUGHES 595

Golgi complex
retention of PDGF in endoplasmic reticulum of transfected CHO cells: THYBERG, OSTMAN, BACKSTROM, WESTERMARK AND HELDIN 219

Growth
duration of steps in *Scenedesmus quadricauda*: ZACHLEDER AND SETLIK 631

Growth factors
effects on human hair growth: PHILPOTT, GREEN AND KEALEY 463

Growth regulation
of human diploid fibroblasts: KILL AND SHALL 473

H

Hair follicles
human, growth *in vitro*: PHILPOTT, GREEN AND KEALEY 463

Hayflick limit
of lifespan of human diploid fibroblasts: KILL AND SHALL 473

Heart conduction system
co-expression of neurofilament proteins with desmin: VITADELLO, MATTEOLI AND GORZA 11

Hepatocytes
primary, fibronectin-binding proteins: STAMATOGLOU, SULLIVAN, JOHANSSON, BAYLEY, BURDETT AND HUGHES 59

Heterokaryons
gene expression pattern of chick erythrocyte nuclei in: BERGMAN AND ENGERTZ 167

Heterotrophic growth
in alga, *Scenedesmus quadricauda*: ZACHLEDER AND SETLIK 631

HL-60
cell proliferation, culture conditions: SCHUMPP AND SCHLAEGER 639

HT29 cells
effect of temperature on tight junction assembly and membrane lipid mobility: COHEN, OPHIR, HENIS, BACHER AND SHAUL 119

Hybridization
in situ in study of DNA in bovine sperm nucleus: POWELL, CRAN, JENNINGS AND JONES 185

I

- Image processing**
in study of membrane molecular redistribution in cell adhesion: HANDEL, HENDRY AND SHETERLINE 325
- Immunohistochemistry**
of basal epithelial cells: PURKISS, STEEL, MACKENZIE, NATHRATH, LEIGH AND LANE 39
- Influenza**
resistance to conferred by murine *Mx1* gene: CHANG, GERLACH *et al.* 497
- In situ hybridization**
in study of genome organization in bovine sperm: POWELL, CRAN, JENNINGS AND JONES 185
- Insulin**
role in proliferation of Swiss 3T3 cells: BROOKS, HOWARD, LEAKE AND RIDDLE 71
- Integrin**
mobility, regulation in normal and RSV-transformed chick embryo fibroblasts: HORVATH AND KELLIE 307
- Interchange heterozygotes**
of *Briza humilis*, 3-D arrangement of chromosomes: MOSS AND MURRAY 565
- Interferon-inducible**
murine *Mx1* gene: CHANG, GERLACH *et al.* 497
- Intermediate filaments**
assembled from tailless keratins: HATZFELD AND WEBER 317
location of centrosomal antigen: BUENDIA, ANTONY, VERDE, BORNENS AND KARSENTI 259
role in adrenal steroidogenesis: ALMAHBOBI AND HALL 679
- Intestine**
suckling rat, endocytic pathways in absorptive cells: FUJITA, REINHART AND NEUTRA 385
- Intracellular localization**
of PDGF in transfected CHO cells: THYBERG, OSTMAN, BACKSTROM, WESTERMARK AND HELDIN 219
- in vitro assembly**
of intermediate filaments: HATZFELD AND WEBER 317

K

- Keratinocytes**
human, proliferation and differentiation: JENSEN, ELGJO, LAERUM AND BOLUND 51
- Keratins**
expression in complex epithelia: PURKISS, STEEL, MACKENZIE, NATHRATH, LEIGH AND LANE 39
synthesis during urothelial cell differentiation: SURYA, YU, MANABE AND SUN 419
tailless, assemble from regular intermediate filaments: HATZFELD AND WEBER 317
- Kidney development**
temporal changes in cellular expression: FODDY, STAMATOGLU AND HUGHES 139
- Kinetochores**
monoclonal antibodies in study of structure and function: BALCZON, ACCAVITTI AND BRINKLEY 705

L

- Lamina**
nuclear, role in nuclear envelope digestion in *Xenopus* oocyte germinal vesicles: WHYTOCK, MOIR AND STEWART 571
- Laminin**
potentiates differentiation of PCC4uvr embryonal carcinoma into neurons: SWEENEY, OGLE AND LITTLE 23
- Lectin**
in isolation of carbohydrate-binding protein of BHK cells: FODDY, STAMATOGLU AND HUGHES 139
- Lifespan**
limited, of human diploid fibroblasts: KILL AND SHALL 473
- Liver**
cat, marmoset, subcellular distribution of aminotransferases: DANPURE, GUTTRIDGE, FRYER, JENNINGS, ALLSOP AND PURDUE 669

- L-Tyrosine**
transport by melanoma cells: JARA, MARTINEZ-LIARTE, SOLANO AND PENAFIEL 479
- Lysosomal enzyme secretion**
role of osteoclasts: BARON, NEFF, BROWN, LOUWARD AND COURTOY 439
- Lysosomal membrane proteins**
in osteoclasts: BARON, NEFF, BROWN, LOUWARD AND COURTOY 439
- Lysosomes**
in study of endocytic pathways in absorptive cells of rat ileum: FUJITA, REINHART AND NEUTRA 385

M

- Malaria**
transport of ions and metabolites in host: MURAKAMI, TANABE AND TAKADA 487
- Mannose 6-phosphate**
cation-independent receptor in osteoclasts: BARON, NEFF, BROWN, LOUWARD AND COURTOY 439
- MAP**
in study of kinetochore structure and function: BALCZON, ACCAVITTI AND BRINKLEY 705
- MDCK cells**
development of desmosomal adhesion after calcium switching: MATTEY, BURDGE AND GARROD 689
- Megacaryocytes**
differentiation, role of cytoskeleton: TABLIN, CASTRO AND LEVEN 59
- Megaselia scalaris**
study of mitotic and meiotic spindles: WOLF 91
- Meiosis**
in insect orders: WOLF 91
- Melanoma cells**
transport of L-tyrosine: JARA, MARTINEZ-LIARTE, SOLANO AND PENAFIEL 479
- Membrane cytoskeleton**
in acetylcholine receptor aggregation in rat myotubes: DANIELS 615
- Membrane proteins**
in peroxisomes induced in *Candida boidinii* by different agents are similar: GOODMAN, TRAPP, HWANG AND VEENHUIS 193
- Membrane recycling**
in endocytosis in elongating root cells of *Lobelia erinus*: SAMUELS AND BISALPUTRA 157
- Membrane topography**
in conjugates between cytolytic T cells and target cells: HANDEL, HENDRY AND SHETERLINE 325
- Metalloproteinase**
pattern of expression by corneal fibroblasts: ARCHER, McDOWELL, BAYLISS, STEPHENS AND BENTLEY 361
pattern of expression by corneal fibroblasts: FINI AND GIRARD 373
- Microgravity**
decreases *c-fos* induction and serum response element activity: DE GROOT, RIJKEN *et al.* 33
- Microinjection**
in study of differential effects of myosin: ZUREK, SANGER, SANGER AND JOCKUSCH 297
- Microtubule-organizing centres**
in oral apparatus of *Paramecium*, associated proteins: KERYER, IFTODE AND BORNENS 553
- Microtubules**
distribution and function in early *Pelvetia* development: KROFF, MADDOCK AND GARD 545
in study of kinetochore structure and function: BALCZON, ACCAVITTI AND BRINKLEY 705
interzonal, dynamic during spindle elongation: SHELDON AND WADSWORTH 273
nucleating sites in *Drosophila*, influence of taxol: MOGENSEN AND TUCKER 101

preprophase band, role in maturation of new plant cell walls: MINEYUKI AND GUNNING 527
 role in megacaryocyte fragmentation: TABLIN, CASTRO AND LEVEN 59

Microtubule sliding
 in analysis of mitotic spindle elongation: BASKIN AND CANDE 79

Microvasculature
 retinal, pericytes undergo calcification *in vitro*: SCHOR, ALLEN, CANFIELD, SLOAN AND SCHOR 449

Microvessels
 brain, endothelial cells, dynamics of membrane recycling: RAUB AND AUDUS 127

Mitochondria
 in subcellular distribution of aminotransferases in liver in mammals: DANPURE, GUTTRIDGE *et al.* 669

Mitochondrial DNA
 synthesis in yeast in absence of nuclear DNA replication: SAZER AND SHERWOOD 509

Mitosis
 centriole and centrosome in *Drosophila*: CALLAINI AND RIPARBELLI 539
 in insect orders, spindles differ in microtubule and membrane content: WOLF 91
in vitro, spindle elongation: BASKIN AND CANDE 79

Mitotic control
 importance for developmental competence in *Acanthamoeba castellanii*: JANTZEN, SCHULZE AND STOHR 715

Mitotic spindle
 poles, location of centrosomal antigen: BUENDIA, ANTONY, VERDE, BORNENS AND KARSENTI 259

Monensin
 does not consistently inhibit spreading of normal or Duchenne fibroblasts: BROWN, FISHER AND LUCY 149

Monoclonal antibodies
 in study of modulation of chondroitin sulphate structure: CATERSON, MAHMOODIAN *et al.* 411
 marking basal cells in complex epithelia: PURKISS, STEEL, MACKENZIE, NATHRATH, LEIGH AND LANE 39

Mortalization
 of human diploid fibroblasts: KILL AND SHALL 473

Multivesicular body
 in endocytosis in elongating root cells of *Lobelia erinus*: SAMUELS AND BISALPUTRA 157

Muscle
 culture, study of acetylcholine receptor aggregation: DANIELS 615

Mx1
 murine gene, expression in gastrointestinal, respiratory and uterine tracts: CHANG, GERLACH *et al.* 497

Myoblast
 proliferation, of myogenic cells for therapeutic implantation: JONES, MURPHY AND WATT 659

Myocytes
 an analysis of connexon43 in gap junctions: LAIRD AND REVEL 109

Myogenesis
 in mouse muscle development: JONES, MURPHY AND WATT 659

N

Neurofilaments
 proteins co-expressed with desmin in heart conduction system: VITADELLO, MATTEOLI AND GORZA 11

Neuromuscular junction
 cell membrane differentiation: DANIELS 615

Neurons
 laminin potentiates differentiation of PCC4uva embryonal carcinoma into: SWEENEY, OGLE AND LITTLE 23

Nocodazole
 effect on megacaryocyte fragmentation: TABLIN, CASTRO AND LEVEN 59

Non-muscle myosin
 differential effects in epitheloid cells: ZUREK, SANGER, SANGER AND JOCKUSCH 297

Nuclear assembly
 differs in extracts from eggs and oocytes of *Xenopus*: COX AND LENO 177

Nuclear envelope
 selective digestion, in *Xenopus* oocyte germinal vesicles: WHYTOCK, MOIR AND STEWART 571

O

Oral filaments
 of *Paramecium*, proteins associated with MTOCs: KERYER, IPTODE AND BORNENS 553

Organ maintenance
 of human hair follicles *in vitro*: PHILPOTT, GREEN AND KEALEY 463

Orgyia antiqua
 study of mitotic and meiotic spindles: WOLF 91

Osteoarthritis
 modulation of chondroitin sulphate structure: CATERSON, MAHMOODIAN *et al.* 411

Osteoclasts
 inactivation by calcitonin: BARON, NEFF, BROWN, LOUARD AND COURTOY 439

Osteogenesis
 role of pericytes: SCHOR, ALLEN, CANFIELD, SLOAN AND SCHOR 449

P

Paramecium gullet
 proteins associated with MTOCs: KERYER, IPTODE AND BORNENS 553

PDGF
 failed to stimulate sustained proliferation of Swiss 3T3 cells: BROOKS, HOWARD, LEAKE AND RIDDLE 71
 localization in transfected CHO cells: THYBERG, OSTMAN, BACKSTROM, WESTERMARK AND HELDIN 219

Pericytes
 from retinal microvasculature undergo calcification *in vitro*: SCHOR, ALLEN, CANFIELD, SLOAN AND SCHOR 449

Peroxisomes
 induced in *Candida bodinii*: GOODMAN, TRAPP, HWANG AND VEENHUIS 193
 in subcellular distribution of hepatic alanine:glyoxylate aminotransferases: DANPURE, GUTTRIDGE *et al.* 669

Phorbol myristate acetate
 in study of metalloproteinase expression by corneal fibroblasts: FINI AND GIRARD 373

Phragmatobia fuliginosa
 study of mitotic and meiotic spindles: WOLF 91

Phytohormone
 responsiveness in wheat leaves: JOHN, SEK, CARMICHAEL AND McCURDY 627

Plant cell division
 control in wheat leaves: JOHN, SEK, CARMICHAEL AND McCURDY 627

Plant cell division cycle
 role of preprophase band of microtubules in cell wall maturation: MINEYUKI AND GUNNING 527

Plasmodium
 transport of ions and metabolites in host: MURAKAMI, TANABE AND TAKADA 487

Polarity
 establishment in early *Pelvetia* embryos: KROPP, MADDOCK AND GARD 545

Pores
 in nuclear envelope of *Xenopus* oocyte germinal vesicles: WHYTOCK, MOIR AND STEWART 571

Preprophase band
 relationship to F-actin and division site in *Allium* cells: MINEYUKI AND PALEVITZ 283

- role in maturation of new plant cell walls: MINEYUKI AND GUNNING 527
- Proliferation**
of HL-60 cells, culture conditions: SCHUMPP AND SCHLAEGER 639
- Proteases**
induce tight junctions in HT29 cells: COHEN, OPHIR, HENIS, BACHER AND SHAUL 191
- Protein sequence**
of desmosomal glycoproteins similar to cell adhesion molecules: HOLTEN, KENNY, LEGAN, COLLINS, KEEN, SHARMA AND GARROD 239
- Proteoglycans**
synthesis in culture in pig articular cartilage: HANDEL, HENDRY AND SHETERLINE 325
- Proteolysis**
as a probe of nuclear envelope structure in *Xenopus* oocyte germinal vesicles: WHYTOCK, MOIR AND STEWART 571
- p34^{cdc2}**
homologue level in wheat leaves: JOHN, SEK, CARMICHAEL AND MCCURDY 627

R

- Regeneration**
of human epidermal keratinocytes in culture: JENSEN, ELGJO, LAERUM AND BOLUND 51
- Reproductive steps**
duration in *Scenedesmus quadricauda*: ZACHLEDER AND SETLIK 631
- Ricin agglutinin**
in study of endocytosis and membrane recycling in endothelial cells: RAUB AND AUDUS 127
- RSV**
-transformed chick embryo fibroblasts: HORVATH AND KELLIE 307

S

- Scenedesmus quadricauda**
timing of events in cell reproductive sequences: ZACHLEDER AND SETLIK 631
- Sequence analysis**
in study of malarial parasite and ion transport: MURAKAMI, TANABE AND TAKADA 487
- Serine:pyruvate aminotransferases**
subcellular distribution in mammalian species: DANPURE, CUTTRIDGE, FRYER, JENNINGS, ALLSOP AND PURDUE 669
- Serum response element**
decreased by microgravity: DE GROOT, RIJKEN *et al.* 33
- Signal transduction**
modified by alterations in gravity: DE GROOT, RIJKEN *et al.* 33
- Sperm nucleus**
bovine, spatial organization of repetitive DNA sequences: POWELL, CRAN, JENNINGS AND JONES 185
- Spindle elongation**
interzonal microtubules dynamic during: SHELDON AND WADSWORTH 273
- Steroidogenesis**
adrenal, role of intermediate filaments: ALMAHBOBI AND HALL 679
- Stress fibres**
in study of actin filaments in PtK2 cells: HANDEL, HENDRY AND SHETERLINE 325

T

- Taxol**
effect on megacaryocyte fragmentation: TABLIN, CASTRO AND LEVEN 59
influences control of protofilament number at microtubule-nucleating sites in *Drosophila*: MOGENSEN AND TUCKER 101

- Temperature**
effect on tight junction assembly and membrane lipid mobility in HT29 cells: COHEN, OPHIR, HENIS, BACHER AND SHAUL 191
- Three-dimensional reconstruction**
of chromosomes at meiotic metaphase in *Briza humilis* heterozygotes: MOSS AND MURRAY 565
- Tight junctions**
effect of temperature on assembly: COHEN, OPHIR, HENIS, BACHER AND SHAUL 119
in characterization of ZO-1 protein in endothelial and other cell lines: LI AND POZNANSKY 231
- Tip morphology**
in early *Pelvetia* embryos: KROPP, MADDOCK AND GARD 545
- Tradescantia stamen hair cell**
cytokinesis and preprophase band: MINEYUKI AND GUNNING 527
- Transfection**
of CHO cells, localization of PDGF: THYBERG, OSTMAN, BACKSTROM, WESTERMARK AND HELDIN 219
- trans-Golgi network**
in study of dynamics of membrane recycling in brain microvessel endothelial cell monolayers: RAUB AND AUDUS 127
- Tumour necrosis factor**
receptors on HL-60 cell surface: SCHUMPP AND SCHLAEGER 639

U

- Uroplakin I**
synthesis during urothelial cell differentiation: SURYA, YU, MANABE AND SUN 419
- Urothelial differentiation**
in bovine cells in culture: SURYA, YU, MANABE AND SUN 419

V

- Vesicular translocation**
in osteoclasts: BARON, NEFF, BROWN, LOUARD AND COURTOY 439
- Vibrating electrode**
analysis of extracellular ion currents in *Acetabularia*: O'SHEA, GOODWIN AND RIDGE 503
- vps mutants**
of yeast, lack functional vacuoles: DULIC AND REIZMAN 517

W

- Wheat leaf**
cell division, hormone response and differentiation: JOHN, SEK, CARMICHAEL AND MCCURDY 627
- Xenopus eggs**
differ from oocytes in nuclear assembly and DNA replication: COX AND LENO 177

X

- Xenopus oocytes**
differ from eggs in nuclear assembly and DNA replication: COX AND LENO 177

Y

- Yeast vacuole**
biosynthesis: DULIC AND REIZMAN 517

Z

- ZO-1 protein**
characterization in endothelial and other cell lines: LI AND POZNANSKY 231