## Adenosine uptake

— by isolated membrane vesicles from Escherichia coli K-12 (Komatsu) (330) 206

#### Adenylate cyclase

Biochemical aspects of the visual process. XXIV. —— and rod photoreceptor membranes: A critical appraisal (Hendriks et al.) (330) 156

# Amino acid analyses

N-Terminal — reveal peptide heterogeneity in major electrophoretic protein components of erythrocyte ghosts (Knüfermann et al.) (330) 356

# Amino acid transport

Acidic — in Neurospora crassa mycelia (Wolfinbarger, Kay) (330) 335

## Antiserum

Ceramide tetrasaccharide of human erythrocyte membrane reacting with anti-type XIV pneumococcal polysaccharide ——
(Siddiqui, Hakomori) (330) 147

# **ATPase**

Occurrence and properties of (Na<sup>+</sup>-K<sup>+</sup>)— in immature, lactating and involuted guinea pig mammary gland. Studies on Na<sup>+</sup>-K<sup>+</sup>-activated ATPase XXXII (Vreeswijk et al.) (330) 173

#### **ATPase**

Ouabain-receptor interactions in  $(Na^+ + K^+)$ —preparations. II. Effect of cations and nucleotides on rate constants and dissociation constants (Erdmann, Schoner) (330) 302

# ATPase

Ouabain-receptor interactions in  $(Na^+ + K^+)$  — preparations. III. On the stability of the ouabain receptor against physical treatment, hydrolases and SH reagents (Erdmann, Schoner) (330) 316

## **ATPase**

Stabilization by cations of microsomal —— against heat inactivation (Kirschmann et al.) (330) 167

# Bilirubin uptake

Sodium effect on —— by the rat intestinal mucosa (Serrani et al.) (330) 186

## Black membranes

Electrical properties of — from oxidized cholesterol and a stongly bound protein fraction of human erythrocyte membranes

(Lossen et al.) (330) 132

## Calcium binding

— by the erythrocyte membrane (Duffy, Schwarz) (330) 294

# Carrier-mediated diffusion

Determination of rate constants in ——through lipid bilayers (Gambale et al.) (330) 325

# Carrier-mediated transport

— of thiamine in baker's yeast (Iwashima et al.) (330) 222

#### Cations

Ouabain-receptor interactions in (Na<sup>+</sup>+ K<sup>+</sup>)-ATPase preparations. II. Effect of — and nucleotides on rate constants and dissociation constants (Erdmann, Schoner) (330) 302

## Cations

Stabilization by —— of microsomal ATP-ase against heat inactivation (Kirschmann et al.) (330) 167

## Cell surface

— constituents of sarcoma 180 ascites tumour cells (Shin, Carraway) (330) 254

# Ceramide tetrasaccharide

of human erythrocyte membrane reacting with anti-type XIV pneumococcal polysaccharide antiserum (Siddiqui, Hakomori) (330) 147

## Chloride flux

— across frog skins of low potential difference (Watlington, Jessee) (330) 102

## Cholesterol

Effects of — on the infrared dichroism of phosphatide multibilayers (Verma, Wallach) (330) 122

## Cholesterol

Electrical properties of black membranes from oxidized — and a strongly bound protein fraction of human erythrocyte membranes (Lossen et al.) (330) 132

## Cholesterol

Role of —— in membranes: Effects on phospholipid-protein interactions, membrane permeability and enzymatic activity (Papahadjopoulos et al.) (330) 8

# Citrate-dependent iron transport

Inducible — system in Escherichia coli K12 (Frost, Rosenberg) (330) 90

## Epithelial cells

Na+ gradient and D-galactose accumula-

tion in —— of bullfrog small intestine (Armstrong et al.) (330) 237

# Erythrocyte ghosts

N-Terminal amino acid analyses reveal peptide heterogeneity in major electrophoretic protein components of (Knüfermann et al.) (330) 356

# Erythrocyte membrane

Calcium binding by the —— (Duffy, Schwarz) (330) 294

# Erythrocyte membrane

Ceramide tetrasaccharide of human ——reacting with anti-type XIV pneumococcal polysaccharide antiserum (Siddiqui, Hakomori) (330) 147

# Erythrocyte membranes

Electrical properties of black membranes from oxidized cholesterol and a strongly bound protein fraction of human —— (Lossen et al.) (330) 132

# Erythrocyte membranes

Thickness of air-dried human —— as determined by energy transfer (Peters) (330) 53

# Excitable membrane

Studies of — formed on the surface of of protoplasmic drops isolated from Nitella. IV. Excitability of the drop membrane in various compositions of the external salt solution (Inoue et al.) (330) 27

# Fatty acid

Influence of —— and sterol composition on the lipid phase transition and activity of membrane-bound enzymes in Acholeplasma laidlawii (De Kruyff et al.) (330) 269

#### p-Galactose

Na<sup>+</sup> gradient and — accumulation in epithelial cells of bullfrog small intestine (Armstrong et al.) (330) 237

# Glucose release

— measurements from liposomes with an oxygen electrode (Hertz, Barenholz) (330) 1

# Hydrolases

Ouabain-receptor interactions in  $(Na^+ + K^+)$ -ATPase preparations. III. On the stability of the ouabain receptor against physical treatment, —— and SH reagents (Erdmann, Schoner) (330) 316

## Inner membranes

Separation and enzymatic characterization of —— and outer membranes of rat-heart mitochondria (Scholte) (330) 283

## Ion movement

Action of serratamolide on — in lipid bilayers and biomembranes (Deol et al.) (330) 192

#### Iron transport

Inducible citrate-dependent —— system in Escherichia coli K12 (Frost, Rosenberg) (330) 90

## Lactose transport

Quantitative aspects of active transport by the —— system of Escherichia coli (Maloney, Wilson) (330) 196

## Lecithin

Temperature and frequency dependence of longitudinal proton relaxation times in sonicated —— dispersions (McLaughlin et al.) (330) 109

## Lipids

Light-induced free radical oxidation of membrane —— in photoreceptors of frog retina (Kagan et al.) (330) 76

## Lipid bilayers

Action of serratamolide on ion movement in — and biomembranes (Deol et al.) (330) 192

## Lipid bilayers

Determination of rate constants in carriermediated diffusion through lipid bilayers (Gambale et al.) (330) 325

# Lipid multilayers

Structural investigations of —, polypeptide and protein multilayers (Green et al.) (330) 243

## Lipid phase transition

Influence of fatty acid and sterol composition on the —— and activity of membrane-bound enzymes in Acholeplasma laidlawii (De Kruyff et al.) (330) 269

# Liposomes

Glucose release measurements from —with an oxygen electrode (Hertz, Barenholz) (330) 1

# Lysosomal membranes

Nature and localization of acidic groups on —— (Henning et al.) (330) 61

# Mammary gland

Studies on Na<sup>+</sup>-K<sup>+</sup>-activated ATPase. XXXII. Occurrence and properties of (Na<sup>+</sup>-K<sup>+</sup>)-ATPase in immature, lactating and involuted guinea pig (Vreeswijk et al.) (330) 173

# Membranes

Separation and enzymatic characterization of inner and outer —— of rat-heart mito-chondria (Scholte) (330) 283

## Membrane-bound enzymes

Influence of fatty acid and sterol composition on the lipid phase transition and activity of —— in Acholeplasma laidlawii (De Kruyff et al.) (330) 269

## Membrane differentiation

— in phototrophically growing Rhodospirillum rubrum during transition from low to high light intensity (Irschik, Oelze) (330) 80

## Membrane lipids

Light-induced free radical oxidation of — in photoreceptors of frog retina (Kagan et al.) (330) 76

# Membrane lipids

Modulation of red cell K<sup>+</sup> transport by —— (Poznansky et al.) (330) 351

## Membrane permeability

Role of cholesterol in membranes: Effects on phospholipid-protein interactions, — and enzymatic activity (Papahadjopoulos et al.) (330) 8

## Membrane vesicles

Adenosine uptake by isolated — from Escherichia coli K-12 (Komatsu) (330) 206 tochondria

Separation and enzymatic characterization of inner and outer membranes of rat-heart —— (Scholte) (330) 283

## Mucosa

Sodium effect on bilirubin uptake by the rat intestinal — (Serrani et al.) (330) 186

# Nerve-ending particles

Potassium ion-induced swelling of — by light-scattering measurement (Kamino et al.) (330) 39

## Nucleotides

Ouabain-receptor interactions in  $(Na^+ + K^+)$ -ATPase preparations. II. Effect of cations and —— on rate constants and dissociation constants (Erdmann, Schoner) (330) 302

# Ouabain-receptor interactions

— in (Na<sup>+</sup>+K<sup>+</sup>)-ATPase preparations. II. Effect of cations and nucleotides on rate constants and dissociation constants (Erdmann, Schoner) (330) 302

# Ouabain-receptor interactions

— in (Na<sup>+</sup>+K<sup>+</sup>)-ATPase preparations. III. On the stability of the ouabain receptor against physical treatment, hydrolases and SH reagents (Erdmann, Schoner) (330) 316

# Outer membranes

Separation and enzymatic characterization of inner and — of rat-heart mitochondria (Scholte) (330) 283

# Phosphatide multibilayers

Effects of cholesterol on the infrared dichroism of —— (Verma, Wallach) (330) 122

## Phospholipid-protein interactions

Role of cholesterol in membranes: Effects on —, membrane permeability and

enzymatic activity (Papahadjopoulos et al.) (330) 8

# **Photoreceptors**

Light-induced free radical oxidation of membrane lipids in — of frog retina (Kagan et al.) (330) 76

## Photoreceptor membranes

Biochemical aspects of the visual process. XXIV. Adenylate cyclase and rod —: A critical appraisal (Hendriks et al.) (330) 156

## Plasma membrane

Effect of pH on the OsO<sub>4</sub>-revealed structure of the — of Chara corallina (Coster, Kaplin) (330) 141

# Polypeptide multilayers

Structural investigations of lipid, — and protein multilayers (Green et al.) (330) 243 Potassium ion

# induced swelling of nerve-ending

particles by light-scattering measurement (Kamino et al.) (330) 39

# Potassium transport

Modulation of red cell —— by membrane lipids (Poznansky et al.) (330) 351

# Potential difference

#### Protein

Electrical properties of black membranes from oxidized cholesterol and a strongly bound — fraction of human erythrocyte membranes (Lossen et al.) (330) 132

## Protein multilayers

Structural investigations of lipid, polypeptide and — (Green et al.) (330) 243

# Serratamolide

Action of — on ion movement in lipid bilayers and biomembranes (Deol et al.) (330) 192

## Sodium

effect on bilirubin uptake by the rat intestinal mucosa (Serrani et al) (330) 186 Sodium gradient

and p-galactose accumulation in epithelial cells of bullfrog small intestine (Armstrong et al.) (330) 237

# Sodium-potassium-activated ATPase

Ouabain-receptor interactions in preparations. II. Effect of cations and nucleotides on rate constants and dissociation constants (Erdmann, Schoner) (330) 302

# Sodium-potassium-activated ATPase

Ouabain-receptor interactions in ——preparations. III. On the stability of the ouabain receptor against physical treatment,

hydrolases and SH reagents (Erdmann, Schoner) (330) 316

# Sodium-potassium-activated ATPase

Studies on Na<sup>+</sup>-K<sup>+</sup>-activated ATPase. XXXII. Occurrence and properties of ——in immature, lactating and involuted guinea pig mammary gland. (330) 173

## Sterol

Influence of fatty acid and — composition on the lipid phase transition and activity of membrane-bound enzymes in Acholeplasma laidwaii (De Kruyff et al.) (330) 269

## Thiamine

Carrier-mediated transport of — in baker's yeast (Iwashima et al.) (330) 222

# Transport

Quantitative aspects of active — by the lactose transport system of Escherichia coli (Maloney, Wilson) (330) 196

## Tumour cells

Cell surface constituents of sarcoma 180 ascites —— (Shin, Carraway) (330) 254

## Yeast

Carrier-mediated transport of thiamine in baker's — (Iwashima et al.) (330) 222