



Metabolism DNA Replication, Recombination, and Repair

- (E) A185R δ DNA polymerase
- (E) A544R* ATP-dependent DNA ligase
- (E) A583L* DNA topoisomerase II
- A193L PCNA
- A574L PCNA
- A399R RNaseH
- A456L Superfamily III helicase
- (E,L) A50L* Pyrimidine dimer-specific glycosylase
- A437L DNA binding protein
- A417L Replication factor C
- (E) A166R* Exonuclease

Nucleotide Metabolism

- (E) A169R* Aspartate transcarbamylase
- A476R Ribo. reductase (small subunit)
- A629R Ribo. reductase (large subunit)
- A427L Thioredoxin
- A438L* Glutaredoxin
- (E) A551L* dUTP pyrophosphatase
- A596R* dCMP deaminase
- A416R dG/dA kinase
- A326L NTP pyrophosphohydrolase
- A200R Cytidine deaminase
- A674R* Thymidylate synthase X
- A554L ATPase
- A392R ATPase

Transcription

- (E) A107L Transcription factor TFIIIB
- A125L Transcription factor TFIIIS
- (E) A552R Transcription factor TFIIID
- A482R VLTf2-type transcription factor
- (E) A103R* RNA guanylyltransferase
- A449R* RNA triphosphatase
- A153R Superfamily II helicase
- A363R Superfamily II helicase
- (E) A464R* RNase II
- A548L SWI/SNF helicase
- A241R Ski1 helicase
- (L) A612L* Histone H3, Lys27 methylase

Protein Synthesis, Modification, and Degradation

- A39L SKP-1 protein
- (E,L) A666L Translation elongation factor-3
- (L) A85R* Prolyl 4-hydroxylase
- A105L Ubiquitin C-terminal hydrolase
- A448L Protein disulphide isomerase
- A465R Thiol oxidoreductase
- A604L Zn metalloproteinase
- 11 tRNAs

Cell Wall Degrading Enzymes

- (E) A94L* β -1,3-glucanase
- (E) A181/182R* Chitinase
- (L) A260R* Chitinase
- (L) A292L* Chitosanase
- (E,L) A215L* Alginate lyase

Sugar and Lipid Manipulation

- (E) A98R* Hyaluronan synthase
- (E) A100R* Glucosamine synthase
- (E) A609L* UDP-glucose dehydrogenase
- (E) A118R* GDP-D-mannose dehydratase
- (E) A295L* Fucose synthase
- (E,L) A64R Mannosyltransferase
- A111R Glycosyltransferase
- A114R Fucosyltransferase
- A222/226R Glycosyltransferase
- (E) A473L Glycosyltransferase
- A546L Glycosyltransferase
- A49L Glycerophosphoryl diesterase
- A53R 2-hydroxyacid dehydrogenase
- A173L Patatin phospholipase
- A271L Lysophospholipase
- A297L Fructose-2,6-bisphosphatase
- A402R Lipoprotein lipase
- A654L N-acetyltransferase

Signaling

- (E,L) A250R* K+ channel protein
- A162L Ligand-gated channel protein
- A163R Ligand-gated channel protein
- A34R* Ser/Thr protein kinase
- (L) A248R* Ser/Thr Protein kinase
- A277L Ser/Thr protein kinase
- A278L* Ser/Thr protein kinase
- A282L* Ser/Thr protein kinase
- A289L* Ser/Thr protein kinase
- A305L Tyr phosphatase
- A614L* Protein Kinase
- A617R Tyr-protein kinase

DNA Restriction/Modification

- A251R* Adenine DNA methylase [M. CviAII]
- A252R* DNA restriction endonuclease [R. CviAIII]
- (E) A517L* Cytosine DNA methylase [M. CviAIII]
- (L) A530R* Cytosine DNA methylase [M. CviAIV]
- (E) A581R* Adenine DNA methylase [M. CviAI]
- (E) A579L* DNA restriction endonuclease [R. CviAI]
- A683L Cytosine DNA methyltransferase [M.CviAV](E,L)

Integration and Transposition

- A625R Transposase
- A134L Homing endonuclease GIY-YIG
- A287R Homing endonuclease GIY-YIG
- A315L Homing endonuclease GIY-YIG
- A351L Homing endonuclease GIY-YIG
- A495R Homing endonuclease GIY-YIG
- A539R Homing endonuclease GIY-YIG
- A651L Homing endonuclease GIY-YIG
- A422R Homing endonuclease HNH
- A87R Homing endonuclease HNH
- A267L Homing endonuclease HNH
- A478L Homing endonuclease HNH
- A490L Homing endonuclease HNH(L)

Miscellaneous

- (E,L) A207R* Ornithine decarboxylase
- (L) A237R* Homospermidine synthase
- (E) A78R* N-carbamoylput amidohydrolase
- (E) A638R* Agmatine iminohydrolase
- A217L Monoamine oxidase
- A44L BCS1 protein
- A61L O-methyltransferase
- A180R Fibronectin binding protein
- A245R* Cu/Zn-superoxide dismutase
- A284L* Amidase
- A445L ABC transporter protein
- A598L Histidine decarboxylase

Structural Proteins

- (L) A430L Vp54, major coat protein
- (L) A622L Coat protein-like
- A122R Glycoprotein Vp260

* Functional enzyme

(E) Early gene

(L) Late gene