A substantially enzymatically pure hydrolase is provided which is secreted by and isolatable from Pseudomonas mendocina ATCC 53552. Cloning the gene expressing the hydrolase into a suitable expression vector and culturing, such as fermenting the E. coli strain JM101 harboring a plasmid designated pSNtacII, has been found to provide surprisingly high yields of the hydrolase.

5389537

NUCLEASE HAVING ALTERED SPECIFICITY

Raines Ronald T; del CardayreStephen B Madison, WI, UNITED STATES Assigned to Wisconsin Alumni Research Foundation

A ribonuclease molecule altered at a single amino acid, relative to its wild-type form, displays altered substrate specificity and substrate binding mechanism. The altered protein cleaves RNA efficiently after C, U and A residues, whereas the wild-type protein cannot cleave efficiently after A. The change that alters the specificity also permits the protein to cleave poly (A) portions of an RNA molecule processively.

5389538

MUTANT HUMAN PROUROKINASE

Tanabe Toshizumi; Morita Masanori; Hirose Masaaki; Amatsuji Yasuo Hirakata, JAPAN Assigned to The Green Cross Corporation

A mutant human prourokinase wherein a neutral amino acid in the epidermal growth factor (EGF) region of human prourokinase (human PUK) has been replaced with a basic amino acid, or an acidic amino acid has been replaced with a non-acidic amino acid, and a method for producing a mutant human PUK which comprises expression of mutant human PUK by cultivating a host transformed by a plasmid inserted with a DNA sequence coding for said mutant human PUK. By replacing a neutral amino acid in the EGF region of human PUK which is a fibrinolysin with a basic amino acid, or an acidic amino acid with a non-acidic amino acid, half-life in blood can be prolonged, and affinity for fibrin can be improved.

5389540

EXPRESSION OF TETANUS TOXIN FRAGMENT C IN YEAST

Makoff Andrew; Romanos Michael A; Clare Jeffrey; Fairweather Neil F Beckenham, UNITED KINGDOM Assigned to Evans Medical Limited

Expression of tetanus toxin fragment C is accomplished employing a DNA coding sequence having a (G+C)-content that has been increased in the region from nucleotide 410 to the 3' end of the coding sequence relative to the wild-type DNA sequence. This allows the production of complete mRNA transcripts. Typically the (G+C)-content is increased in the following regions: (i) nucleotides 510-710, (ii) nucleotides 650-850, (iii) nucleotides 800-1100, (iv) nucleotides 900-1200 and (v) nucleotides 1100 to the 3' end of the coding sequence. The (G+C)-content may also be increased in the region of nucleotides 410-610. These regions in the wild-type DNA encompass terminator sequences.

5389543

CLONED GENES ENCODING THE D1 DOPAMINE RECEPTOR

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Cloned genes which code for the D1 dopamine receptor are disclosed. The receptors coded for by these clones bind dopamine ligands with the proper pharmacological profile and, when expressed in the cell membrane of a suitable host and so bound, stimulate adenylyl cyclase. Also disclosed are vectors comprising a cloned gene encoding a D1-dopamine receptor, cells transformed with such vectors, and oligonucleotide probes capable of selectively hybridizing to DNA comprising a portion of a gene coding for a D1-dopamine receptor. The cloned genes are useful for making proteins and cell membrane preparations which can be used to screen compounds for D1-dopamine receptor binding activity, are useful in molecular biology, and are useful as diagnostic probes.