Aminopeptidase

Aminopeptidases catalyze the cleavage of amino acids from the amino terminus of protein (N-terminus) or peptide substrates. They are widely distributed throughout the animal and plant kingdoms and are found in many subcellular organelles, in cytoplasm, and as membrane components. Aminopeptidases are used in essential cellular functions. Many, but not all, of these peptidases are zinc Metalloenzymes. Some aminopeptidases are monomeric, and others are assemblies of relatively high mass (50 kDa) subunits. CDNA sequences are available for several aminopeptidases and a crystal structure of the open state of human endoplasmic reticulum Aminopeptidase 1 ERAP1 is presented here. Amino acid sequences determined directly or deduced from cDNAs indicate some amino acid sequence homologies in organisms as diverse as Escherichia coli and mammals, particularly in catalytically important residues or in residues involved in metal ion binding. One important aminopeptidase is a zinc-dependent enzyme produced and secreted by glands of the small intestine. It helps the enzymatic digestion of proteins. Additional digestive enzymes produced by these glands include dipeptidases, maltase, sucrase, lactase, and enterokinase.

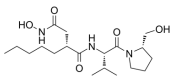
Aminopeptidase Inhibitors

Actinonin

((-)-Actinonin)

Cat. No.: HY-113952

Actinonin ((-)-Actinonin) is a naturally occurring antibacterial agent produced by Actinomyces. Actinonin inhibits **aminopeptidase M**, **aminopeptidase N** and **leucine aminopeptidase**.

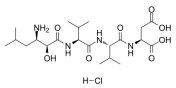


Purity: >98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Amastatin hydrochloride

Cat. No.: HY-115194

Amastatin hydrochloride is a slow, tight binding, competitive **aminopeptidase (AP)** inhibitor with K_i values of 0.26 nM, 30 nM, 52 nM for Aeromonas aminopeptidase, cytosolic leucine aminopeptidase, microsomal aminopeptidase.



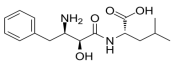
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Bestatin

(Ubenimex)

Cat. No.: HY-B0134

Bestatin is a natural, broad-spectrum, and competitive **aminopeptidase** inhibitor.



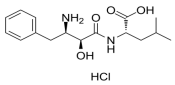
Purity: 99.97%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Bestatin hydrochloride

(Ubenimex hydrochloride)

Cat. No.: HY-B0134A

Bestatin hydrochloride is an inhibitor of **CD13 (Aminopeptidase N)/APN** and **leukotriene A4 hydrolase**, used for cancer treatment.



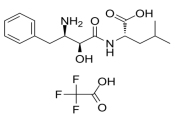
Purity: 99.17%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Bestatin trifluoroacetate

(Ubenimex trifluoroacetate)

Cat. No.: HY-B0134B

Bestatin trifluoroacetate is an inhibitor of **CD13 (Aminopeptidase N)/APN** and **leukotriene A4 hydrolase**, used for cancer treatment.

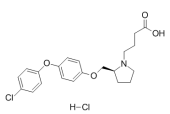


Purity: >98%
Clinical Data: Launched
Size: 1 mg, 5 mg

DG051

Cat. No.: HY-10825

DG051 is a potent **leukotriene A4 hydrolase** inhibitor of leukotriene B4 biosynthesis in the enzyme assay with an IC_{50}=47 nM.

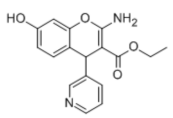


Purity: 99.76%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg

HFI-142

Cat. No.: HY-110259

HFI-142 is an **insulin-regulated aminopeptidase (IRAP)** inhibitor with a K_i of 2.01 μM.

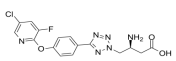


Purity: >99.0%
Clinical Data: No Development Reported
Size: 5 mg

LTA4H-IN-1

Cat. No.: HY-137298

LTA4H-IN-1 is a potent inhibitor of **leukotriene A4 hydrolase (LTA4H)** extracted from patent WO2015092740A1, example 29, has an IC_{50} of 2 nM. LTA4H-IN-1 can be used for the research of inflammatory and autoimmune disorders.

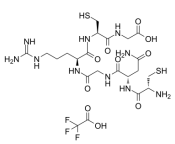


Purity: 98.88%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

NGR peptide Trifluoroacetate

Cat. No.: HY-P1043A

NGR peptide Trifluoroacetate containing the asparagine-glycine-arginine (NGR) motif is recognized by **CD13/aminopeptidase N** (**APN**) **receptor** isoforms that are selectively overexpressed in tumor neovasculature.



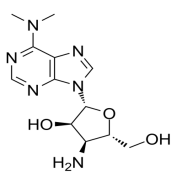
Purity: >98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg

Puromycin aminonucleoside

(NSC 3056)

Cat. No.: HY-15695

Puromycin aminonucleoside (NSC 3056) is the aminonucleoside portion of the antibiotic puromycin, and used in nephrosis animal models. Puromycin aminonucleoside induces **apoptosis**.



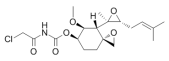
Purity: 99.59%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg, 500 mg, 1 g

Tel: 609-228-6898 Fax: 609-228-5909 Email: sales@MedChemExpress.com

TNP-470

(AGM-1470) **Cat. No.:** HY-101932

TNP-470 is a **methionine aminopeptidase-2** inhibitor and also an **angiogenesis** inhibitor.

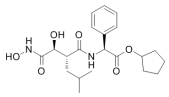


Purity: >99.0%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg

Tosedostat

(CHR-2797) **Cat. No.:** HY-14807

Tosedostat (CHR-2797) is an orally active **aminopeptidase** inhibitor. CHR-2797 exerts antiproliferative effects against a range of tumor cell lines.



Purity: 99.75%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg