



# Recombinant Dog Aminopeptidase N (ANPEP)

<b>Product Code</b>	CSB-EP001827DO-B
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P79143
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Canis lupus familiaris (Dog) (Canis familiaris)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	DLSVIPVINR AQVIHDTFDL ASAQIVPVT ALNSTLFLNQ ETEYMPWEAA LSSLSYFKLM FDRSEVYGPM KNYLRKQVTP LFNHFKITQ NWTDHPQTLT EQYNEINAVS TACTYGVPKC KDLVSTLFAE WRKNPQNNPI YPNLRSTVYC NAIAQGGEEE WNFVWEQFRN TSLVNEADKL RSALACSTQV W
<b>Source</b>	E.coli
<b>Target Names</b>	ANPEP
<b>Protein Names</b>	Recommended name: Aminopeptidase N Short name= AP-N Short name= cAPN EC= 3.4.11.2 Alternative name(s): Alanyl aminopeptidase Aminopeptidase M Short name= AP-M Microsomal aminopeptidase CD_antigen= CD13
<b>Expression Region</b>	1-191
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full length protein
<b>Target Details</b>	Aminopeptidase N is located in the small-intestinal and renal microvillar membrane, and also in other plasma membranes. In the small intestine aminopeptidase N plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases. Its function in proximal tubular epithelial cells and other cell types is less clear. The large extracellular carboxyterminal domain contains a pentapeptide consensus sequence characteristic of members of the zinc-binding metalloproteinase superfamily. Sequence comparisons with known enzymes of this class showed that CD13 and aminopeptidase N are identical. The latter enzyme was thought to be involved in the metabolism of regulatory peptides by diverse cell types, including small intestinal and renal tubular epithelial cells, macrophages, granulocytes, and synaptic membranes from the CNS. Human aminopeptidase N is a receptor for one strain of human coronavirus that is an important cause of upper respiratory tract infections. Defects in this gene appear to be a cause of various types of leukemia or lymphoma.
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final



concentration) and aliquot for long-term storage at  $-20^{\circ}\text{C}/-80^{\circ}\text{C}$ . Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at  $-20^{\circ}\text{C}/-80^{\circ}\text{C}$ . The shelf life of lyophilized form is 12 months at  $-20^{\circ}\text{C}/-80^{\circ}\text{C}$ .