Mouse CD73 / NT5E Protein, His Tag (active enzyme)

Catalog # CD3-M52H9

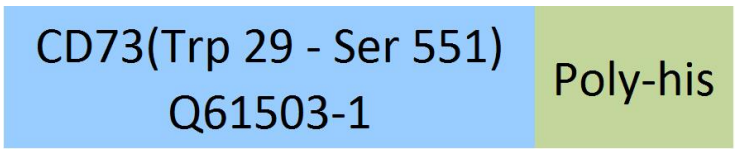
Synonym

CD73,NT5E,5'-Nucleotidase,5'-NT,NT5,NTE

Source

Mouse CD73, His Tag(CD3-M52H9) is expressed from human 293 cells (HEK293). It contains AA Trp 29 - Ser 551 (Accession # Q61503-1).
Predicted N-terminus: Trp 29

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 59.9 kDa. The protein migrates as 66 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 20 mM Tris, 120 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

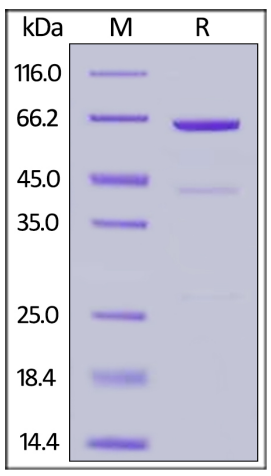
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Mouse CD73, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity

Measured by its ability to hydrolyze the 5'phosphate group from the substrate adenosine 5' monophosphate (AMP). The specific activity is > 20,000 pmol/min/μg (QC tested).

Background

5'-nucleotidase (5'-NT), also known as ecto-5'-nucleotidase or CD73 (cluster of differentiation 73), is an enzyme that is encoded by the NT5E gene. CD73 commonly serves to convert AMP to adenosine. Ecto-5-prime-nucleotidase (5-prime-ribonucleotide phosphohydrolase) catalyzes the conversion at neutral pH of purine 5-prime mononucleotides to nucleosides, the preferred substrate being AMP. Other forms of 5-prime nucleotidase exist in the cytoplasm and lysosomes and can be distinguished from ecto-NT5 by their substrate affinities, requirement for divalent magnesium ion, activation by ATP, and inhibition by inorganic phosphate. Rare allelic variants are associated with a syndrome of adult-onset calcification of joints and arteries (CALJA) affecting the iliac, femoral, and tibial arteries reducing circulation in the legs and the joints of the hands and feet causing pain.