



## Synonym

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

## Source

Human CD73 Protein, His Tag(CD3-H52H7) is expressed from human 293 cells (HEK293). It contains AA Trp 27 - Ser 549 (Accession # [P21589-1](#)).

Predicted N-terminus: Trp 27

## Molecular Characterization

CD73(Trp 27 - Ser 549)  
P21589-1 Poly-his

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

The protein has a calculated MW of 59.9 kDa. The protein migrates as 40 kDa and 65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 1.0 EU per µg by the LAL method.

## Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-HPLC.

## 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

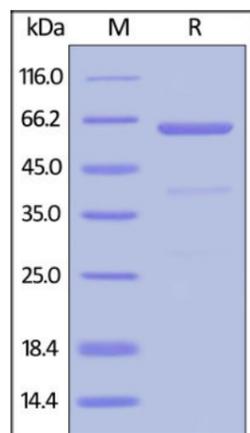
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

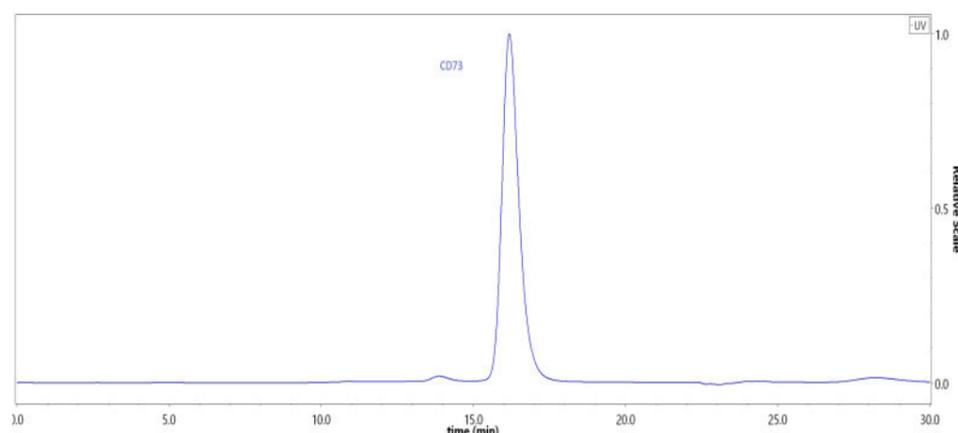
- -20°C to -70°C for 24 months in lyophilized state;
- -70°C for 12 months under sterile conditions after reconstitution.

## SDS-PAGE



Human CD73 Protein, 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%.

## SEC-HPLC

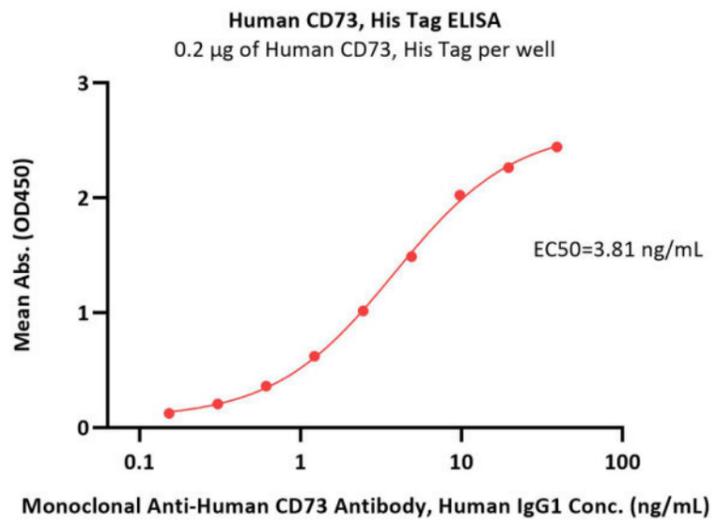


The purity of Human CD73 Protein, His Tag (Cat. No. CD3-H52H7) was greater than 90% as determined by SEC-HPLC.

## Bioactivity-ELISA

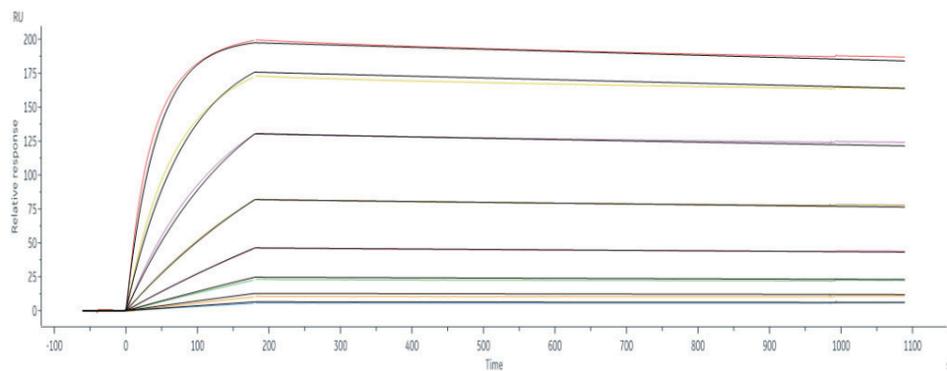
Discounts, Gifts,  
and more!





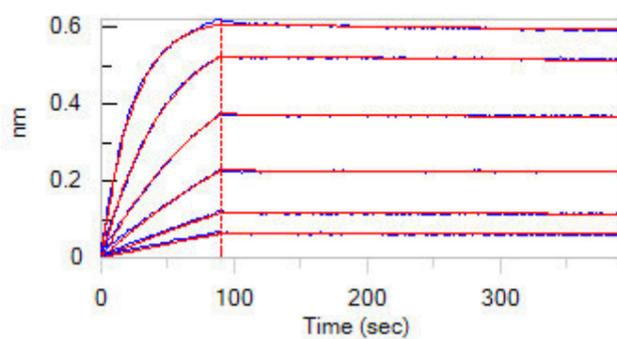
Immobilized Human CD73 Protein, His Tag (Cat. No. CD3-H52H7) at 2 µg/mL (100 µL/well) can bind Monoclonal Anti-Human CD73 Antibody, Human IgG1 with a linear range of 0.15-5 ng/mL (QC tested).

### Bioactivity-SPR



Anti-CD73 antibody (Human IgG1) captured on CM5 chip via Anti-human IgG Fc antibodies surface can bind Human CD73 Protein, His Tag (Cat. No. CD3-H52H7) with an affinity constant of 0.164 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

### Bioactivity-BLI



Loaded Anti-CD73 MAb (Human IgG1) on AHC Biosensor, can bind Human CD73 Protein, His Tag (Cat. No. CD3-H52H7) with an affinity constant of 0.179 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

### Bioactivity

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and more!



# Human CD73 / NT5E Protein, His Tag (HPLC-verified) (active enzyme)

Catalog # CD3-H52H7



BIOSYSTEMS  
**Acro**

Measured by its ability to hydrolyze the 5'-phosphate group from the substrate adenosine-5'-monophosphate (AMP). The specific activity is >100000pmol/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.

## Clinical and Translational Updates

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