

# Human CD73/NT5E Protein

Cat. No. CD7-HM273

## Description

<b>Source</b>	Recombinant Human CD73/NT5E Protein is expressed from HEK293 with hFC tag at the C-Terminus. It contains Trp27-Lys547.
<b>Accession</b>	P21589-1
<b>Molecular Weight</b>	The protein has a predicted MW of 84.5 kDa. Due to glycosylation, the protein migrates to 85-100 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in 20mM Tris, 120mM NaCl (pH 7.5). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

CD73, also known as ecto-5'-nucleotidase, is an enzyme that in humans is encoded by the NT5E gene. CD73 commonly serves to convert AMP to adenosine. The enzyme consists of a dimer of 2 identical 70-kD subunits bound by a glycosyl phosphatidyl inositol linkage to the external face of the plasma membrane. The enzyme is used as a marker of lymphocyte differentiation. A deficiency of CD73 occurs in a variety of immunodeficiency diseases.

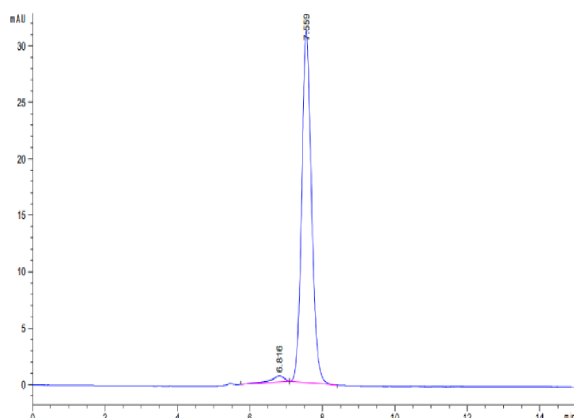
## Assay Data

### Bis-Tris PAGE



Human CD73 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

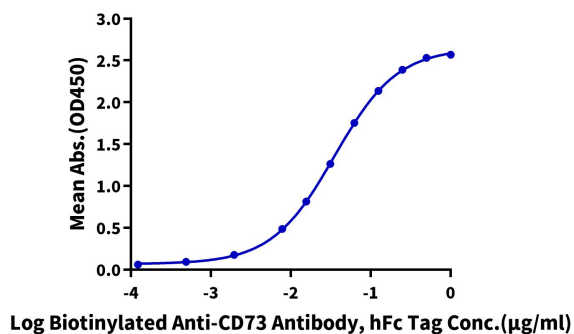


The purity of Human CD73 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

**Human CD73, hFc Tag ELISA**  
0.2µg Human CD73, hFc Tag Per Well



Immobilized Human CD73, hFc Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Anti-CD73 Antibody, hFc Tag with the EC50 of 35.3ng/ml determined by ELISA (QC Test).

Bioactivity Data

Measured by its ability to hydrolyze the 5'-phosphate group from the substrate adenosine-5'-monophosphate (AMP). The specific activity is >10000 pmol/min/µg (QC Test).