## Human CD73/NT5E Protein

Cat. No. CD7-HM173



| Description         |  |
|---------------------|--|
| Source              | Recombinant Human CD73/NT5E Protein is expressed from HEK293 with His tag at the C-Terminus.                                       |
|                     | It contains Trp27-Lys547.  |
| Accession           | P21589-1   |
| Molecular<br>Weight | The protein has a predicted MW of 58.8 kDa. Due to glycosylation, the protein migrates to 60-70 kDa based on Bis-Tris PAGE result. |
| Endotoxin           | Less than 1 EU per μg by the LAL method.   |
| Purity              | > 90% as determined by Bis-Tris PAGE   |
|                     | > 95% as determined by HPLC  |

#### Formulation and Storage

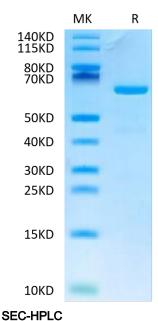
| Formulation    | Lyophilized from 0.22µm filtered solution in 20mM Tris, 120mM NaCl (pH 7.5). Normally 8% trehalose is added as protectant before lyophilization.  |
|----------------|---|
| Reconstitution | Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.   |
| Storage        | -20 to -80°C for 12 months as supplied from date of receipt80°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**

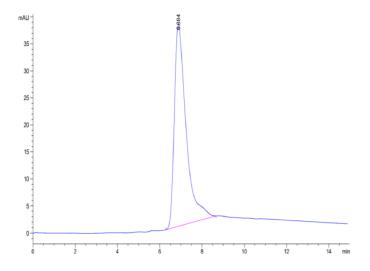


Human CD73 on Bis-Tris PAGE under reduced condition. The purity is greater than 90%.

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# KAGTUS

## **Assay Data**

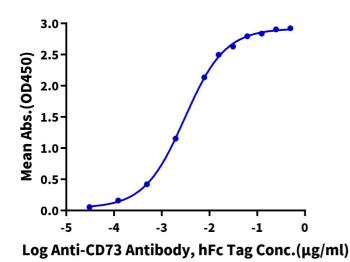


The purity of Human CD73 is greater than 95% as determined by SEC-HPLC.

#### **ELISA Data**

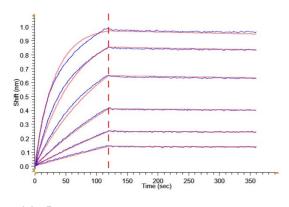
# **Human CD73, His Tag ELISA**

0.2μg Human CD73, His Tag Per Well



Immobilized Human CD73, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Anti-CD73 Antibody, hFc Tag with the EC50 of 3.0ng/ml determined by ELISA (QC Test).

#### **BLI Data**



Loaded Anti-CD73 Antibody, hFc Tag on ProA-Biosensor can bind Human CD73, His Tag with an affinity constant of 0.31 nM as determined in BLI assay (Gator® Prime).

# **Bioactivity Data**

Measured by its ability to hydrolyze the 5'-phosphate group from the substrate adenosine-5'-monophosphate (AMP). The specific activity is >15000 pmol/min/ $\mu$ g (QC Test).