

Technical Data Sheet

PE conjugated Human CD73 (C-His)

Catalog Number: 810001, 810002

Size: 25 ug, 100 ug

Target Name: CD73, NT5E

Regulatory Status: RUO

Product Details

Application: FC

Format: Liquid, PE

Expression Host: CHO

Species: Human

Sources: Recombinant Human CD73 Protein (Trp27-Lys547) with C-terminus His-tag is expressed in CHO cell and conjugated to PE.

Accession Number: P21589

Molecular Weight: The protein has a predicted molecular weight of 59.2 kDa. Under DTT-reducing conditions, it migrates at approximately 65 kDa on SDS-PAGE prior to conjugation.

Affinity Tag: C-His

Formulation: 1xPBS buffer, pH7.4, 0.09% NaN₃ with a carrier protein

Endotoxin level: Not tested

Protein Concentration: 25µg size is bottled at 0.1mg/mL concentration. 100 µg size is bottled at lot specific concentration.

Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2–8°C for up to six months.

Background Information

5'-nucleotidase, also known as NT5E, NTE, or CD73, is a GPI-anchored membrane protein that belongs to the 5'-nucleotidase family. It is expressed on T and B lymphocytes and catalyzes the conversion of purine and pyrimidine nucleotides into their corresponding nucleosides. CD73 functions as a costimulatory molecule in T cell activation and plays a key role in immune responses. CD73 generates adenosine, which acts in cell signaling across various physiological systems, including the intestinal epithelium, ischemic myocardium, and cholinergic synapses. It also helps mediate lymphocyte-stromal interactions and can condition the local microenvironment for lymphocyte function. In the absence of CD73, levels of adhesion molecules like ICAM-1, VCAM-1, and E-selectin increase on cell surfaces. Additionally, CD73-produced adenosine activates G protein-coupled purinergic receptors, influencing cellular responses. It is also involved in regulating pro-inflammatory molecules in endothelial cells, further contributing to immune and inflammatory processes.