Technical Data Sheet

PE Human CD73 Protein (C-His)

Catalog Number: 810001, 810002
Size: 25 ug, 100 ug
Target Name: CD73, NT5E
Regulatory Status: RUO

Product Details

Application: Flow Cytometry
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.