InnoCyto Inc.
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Technical Data Sheet

Human CD73 (C-His)

Catalog Number: 809901, 809902
Size: 25 ug, 100 ug
Target Name: CD73, NT5E
Regulatory Status: RUO

Product Details

Application: ELISA, BLI
Format: Liquid, Purified
Expression Host: CHO
Species: Human
Sources: Recombinant Human CD73 Protein (Trp27-Lys547) with C-terminus His-tag is expressed in CHO cell.
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.
Affinity Tag: C-His
Purity: >95% based on SDS-PAGE under reducing condition
Formulation: 1xPBS buffer, pH7.4, 0.22 μm filtered
Endotoxin level: Not tested
Protein Concentration: 25μg size is bottled at 0.2mg/mL concentration. 100 μg size is supplied at a lot-specific concentration.
Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 μm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at <= –70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

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

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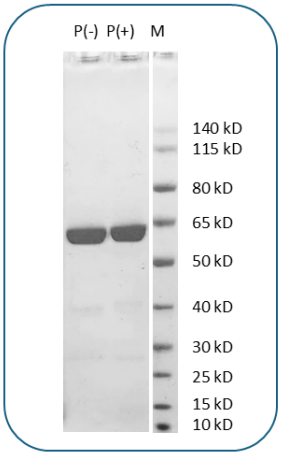
pro-inflammatory molecules in endothelial cells, further contributing to immune and inflammatory processes.

Product Data



Human CD73 (C-His) Protein on SDS-PAGE under non-reducing and reducing conditions. The gel was stained for 1 hour with BlinkBlue Protein Staining Buffer (Catalog 700102). The purity of this protein appears to be greater than 95%.