

Technical Data Sheet

APC Human CD8α Protein (C-His)

Catalog Number: 804003, 804004
Size: 25 ug, 100 ug
Target Name: CD8A, CD8, Leu2, MAL, p32
Regulatory Status: RUO

Product Details

Application: Flow Cytometry

Format: Liquid, APC

Expression Host: CHO

Species: Human

Sources: Recombinant Human CD8 α protein (Ser22-Asp182) with C-terminus His tag is expressed in CHO cells and conjugated to APC.

Accession Number: P01732

Molecular Weight: The protein has a predicted molecular weight of 19 kDa. Under DTT-reducing conditions, it migrates at approximately 25-30 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: 25 μ g size is bottled at 0.1mg/mL concentration. 100 μ g 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

CD8a is a 32–34 kD type I glycoprotein and a member of the immunoglobulin superfamily, expressed on most thymocytes, subsets of peripheral T cells, and NK cells. It forms either homodimers (CD8a/a) or heterodimers (CD8a/b) with CD8b. CD8 functions as a co-receptor for MHC class I-restricted T cell receptors, enhancing antigen recognition and T cell activation. It also plays a role in thymic differentiation. The extracellular IgSF domain of CD8a binds the α 3 domain of MHC class I, while the cytoplasmic CXCP motif interacts with the tyrosine kinase p56 Lck to initiate signal transduction. In NK cells, CD8a homodimers support cytotoxic function and memory formation.