

Technical Data Sheet

PE conjugated Human B7-1 (CD80) (C-His)

Catalog Number: 816801, 816802

Size: 25 ug, 100 ug

Target Name: CD80, B7-1, B7, BB1

Regulatory Status: RUO

Product Details

Application: FC

Format: Liquid, PE

Expression Host: CHO

Species: Human

Sources: Recombinant Human B7-1 (CD80) (Val35-Asn242) with C-terminus His-tag is expressed in CHO cell and conjugated to PE.

Accession Number: Q68D85

Molecular Weight: The protein has a predicted molecular weight of 25.5 kDa. Under DTT-reducing conditions, it migrates at approximately 45 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

B7-1, also known as CD80, is a cell surface glycoprotein in the immunoglobulin superfamily, expressed on activated B cells, macrophages, and dendritic cells. It interacts with the costimulatory receptors CD28 and CTLA-4 on T cells, playing a pivotal role in regulating T cell activation, tolerance, cytokine production, and the generation of cytotoxic T lymphocytes. Through its interactions with CD28 and CTLA-4, CD80 is involved in both enhancing and inhibiting immune responses, thereby maintaining immune balance. This B7/CD28/CTLA-4 pathway is crucial for controlling immune function and is considered a promising target for therapeutic interventions in autoimmune diseases and cancer.