

## APC Human B7-1 (CD80) Protein (C-His)

<b>Catalog Number:</b>	816803, 816804
<b>Size:</b>	25 ug, 100 ug
<b>Target Name:</b>	CD80, B7-1, B7, BB1
<b>Regulatory Status:</b>	RUO

### PRODUCT DETAILS

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<b>Application:</b>	Flow Cytometry
<b>Format:</b>	Liquid, APC
<b>Expression Host:</b>	CHO
<b>Species:</b>	Human
<b>Sources:</b>	Recombinant Human B7-1 (CD80) (Val35-Asn242) with C-terminus His-tag is expressed in CHO cell and conjugated to APC.
<b>Accession Number:</b>	Q68D85
<b>Molecular Weight:</b>	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.
<b>Affinity Tag:</b>	C-His
<b>Formulation:</b>	1xPBS buffer, pH7.4, 0.09% NaN3 with a carrier protein
<b>Endotoxin level:</b>	Not tested
<b>Protein Concentration:</b>	25µg size is bottled at 0.1mg/mL concentration. 100 µg size is bottled at lot specific concentration.
<b>Storage and Handling:</b>	Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2-8°C for up to six months.

### BACKGROUND INFORMATION

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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.