

PE Human CTLA4 (CD152) Protein (C-Fc)

Catalog Number:	808301, 808302
Size:	25 ug, 100 ug
Target Name:	CTLA4, CD152
Regulatory Status:	RUO

PRODUCT DETAILS

Application:	Flow Cytometry
Format:	Liquid, PE
Expression Host:	CHO
Species:	Human
Sources:	Recombinant Human CTLA4 Protein (Ala37-Phe162) with C-terminus Fc-tag is expressed in CHO cell and conjugated to PE.
Accession Number:	P16410
Molecular Weight:	The protein has a predicted molecular weight of 39.7 kDa. Under DTT-reducing conditions, it migrates at approximately 50 kDa on SDS-PAGE prior to conjugation.
Affinity Tag:	C-Fc
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

Cytotoxic T-lymphocyte-associated protein 4 (CTLA-4), also known as CD152, is an immune checkpoint receptor found on T cells. It shares 30% homology with CD28 and binds to the same ligands, B7.1/CD80 and B7.2/CD86, but with higher affinity. After T-cell activation, increased CTLA-4 expression leads to immune suppression by binding to CD80/CD86, inhibiting further T-cell activation through a process called trans-endocytosis. CTLA-4 is crucial for immune regulation and tolerance, especially on regulatory T cells (Tregs). Soluble CTLA-4 (sCTLA-4) further enhances Treg function and is linked to autoimmune diseases like type 1 diabetes. Additionally, CTLA-4 plays a role in chronic lymphocytic leukemia (CLL) progression. Due to its immune-modulatory role, CTLA-4 is targeted in cancer therapy. Ipilimumab, a monoclonal antibody that blocks CTLA-4, is approved for melanoma and is being explored for other cancers.

PRODUCT DATA

A: CTLA4 CAR-transfected
Stained with PE-CTLA4-Fc

B: Mock-transfected
Stained with PE-CTLA4-Fc

CHO cells transfected with either CTLA4 CAR or Mock plasmid were stained with PE conjugated CTLA4 (C-Fc) protein at 1ug/test