

Technical Data Sheet

APC Conjugated Human CTLA4 Protein (C-His)

Catalog Number: 808003, 808004

Size: 25 ug, 100 ug

Target Name: CTLA4, CD152

Regulatory Status: RUO

Product Details

Application: FC

Format: Liquid, APC

Expression Host: CHO

Species: Human

Sources: Recombinant Human CTLA4 Protein (Ala37-Phe162) with C-terminus His-tag is expressed in CHO cell and conjugated to APC.

Accession Number: P16410

Molecular Weight: The protein has a predicted molecular weight of 15 kDa. Under DTT-reducing conditions, it migrates at approximately 25 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.

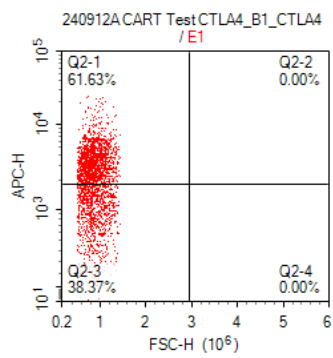
Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial may be stored at 2–8°C for up to six months.

Background Information

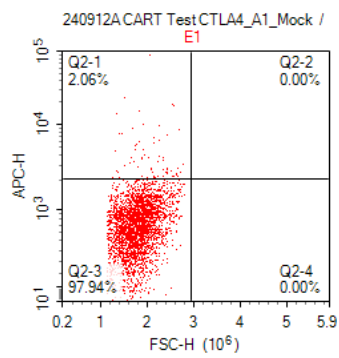
Cytotoxic T-lymphocyte-associated protein 4 (CTLA-4), also known as CD152, is an immune checkpoint receptor found on T cells. It shares 30% homology with CD28 and binds to the same ligands, B7.1/CD80 and B7.2/CD86, but with higher affinity. After T-cell activation, increased CTLA-4 expression leads to 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 APC-CTLA4-His**



**B: Mock-transfected
 Stained with APC-CTLA4-His**



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