

Recombinant Human/Cynomolys CD28/TP44 (C-Fc-Avi) Biotinylated

Catalog Number: PKSH033948

Note: Centrifuge before opening to ensure complete recovery of vial contents.

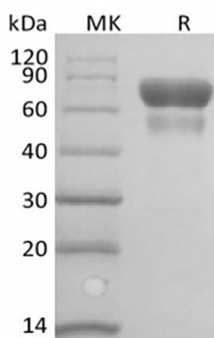
Description

Species	Human/Cynomolys
Source	HEK293 Cells-derived Human/Cynomolys CD28;TP44 protein Asn19-Pro152, with an C-terminal Fc & Avi
Calculated MW	44.1 kDa
Observed MW	60-90 kDa
Accession	P10747
Bio-activity	Loaded Human B7-1-His on HIS1K Biosensor, can bind Biotinylated Human/Cynomolys CD28-Fc-Avi with an affinity constant of 9.09 pM as determined in BLI assay.

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20mTris-HCl, 150mM NaCl, pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

T-cell-specific surface glycoprotein CD28(CD28) is a single-pass type I membrane protein which contains one Ig-like V-type (immunoglobulin-like) domain. It belongs to the immunoglobulin(Ig) superfamily. CD28 is one of the molecules expressed on T cells that provide co-stimulatory signals, which are required for T cell activation. CD28 co-stimulation is necessary for CD4 positive T-cell proliferation and survival, interleukin-2 production, and T-helper type-2 development. Human post-thymic regulatory T cells require CD28 co-stimulation to expand and maintain potent suppressive function in vivo. Apoptosis plays a key role in the age-related decline of CD28 expression and in immunosenescence. CD28 is the receptor for CD80 (B7.1) and CD86 (B7.2). When activated by Toll-like receptor ligands, the CD80 expression is upregulated in antigen presenting cells (APCs). The CD86 expression on antigen presenting cells is constitutive. CD28 is the only B7 receptor constitutively expressed on naive T cells.