

Recombinant Human CD28/TP44 Protein (mFc Tag)

Catalog No. PKSH033788

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

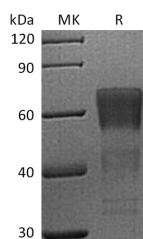
Description

Synonyms	CD28;CD28 antigen;CD28 molecule;T-cell-specific surface glycoprotein CD28;Tp44;TP44
Species	Human
Expression Host	HEK293 Cells
Sequence	Asn19-Pro152
Accession	P10747
Calculated Molecular Weight	41.7 kDa
Observed molecular weight	40-75 kDa
Tag	C-mFc
Bioactivity	Not validated for activity

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 PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	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 typeI membrane protein which contains one Ig-likeV-

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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.