

## Recombinant Human CD28/TP44 Protein (Fc Tag)

Catalog No. PKSH032211

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

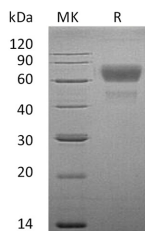
### Description

<b>Synonyms</b>	CD28;CD28 antigen;CD28 molecule;T-cell-specific surface glycoprotein CD28;Tp44;TP44
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Asn19-Pro152
<b>Accession</b>	P10747
<b>Calculated Molecular Weight</b>	42.3 kDa
<b>Observed molecular weight</b>	60-80 kDa
<b>Tag</b>	C-Fc
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

#### For Research Use Only

T-cell-specific surface glycoprotein CD28(CD28) is a single-pass typeI membrane protein which contains one Ig-likeV-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.