

Human CD28 / TP44 Protein



Sino Biological Inc.
Biological Solution Specialist

Catalog Number: 11524-HCCH

General Information

Gene Name Synonym:

Tp44

Protein Construction:

A DNA sequence encoding the human CD28 (P10747-1) (Met 1-Pro 152) was expressed with six amino acids (LEVLFQ) at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Asn 19

Molecular Mass:

The recombinant human CD28 consists of 141 amino acids and predicts a molecular mass of 15.9 KDa. It migrates as an approximately 23 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

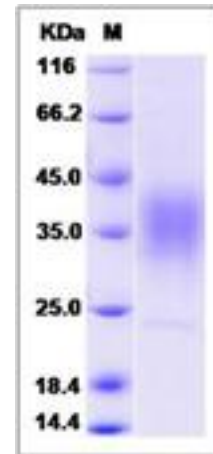
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

CD28 (Cluster of Differentiation 28) is a disulphide-bonded glycoprotein belonging to the immunoglobulin (Ig) superfamily, and structurally consists of a single Ig V-like extracellular domain, a transmembrane domain and an intracellular domain. Mouse CD28 is constitutively expressed on the surface of all murine T cells and on developing thymocytes as disulfide-linked homodimers or as monomers. CD28 can binds the B7-1 and B7-2 ligand, and together perform important functions in the T and B cell response pathways. B7/CD28 family members, which can augment or antagonize T-cell receptor signaling, in the regulation of central and peripheral T-cell tolerance. CD28 is thus involved in T-cell activation, the induction of cell proliferation and cytokine production and promotion of T-cell survival.

References

1. Keir ME, *et al.* (2005) The B7/CD28 costimulatory family in autoimmunity. *Immunol Rev.* 204: 128-43.
2. Sansom DM, *et al.* (2006) The role of CD28 and cytotoxic T-lymphocyte antigen-4 (CTLA-4) in regulatory T-cell biology. *Immunol Rev.* 212: 131-48.
3. Bjrgo E, *et al.* (2010) Novel mechanism of signaling by CD28. *Immunol Lett.* 129(1): 1-6.

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Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>