

## Product Data Sheet

## CD28 Protein, Human/Cynomolgus (HEK293, mFc)

Cat. No.:	HY-P78416
Synonyms:	CD28 antigen (Tp44); CD28 antigen; CD28 molecule; CD28; MGC138290; T-cell-specific surface glycoprotein CD28; Tp44
Species:	Cynomolgus
Source:	HEK293
Accession:	P10747 (N19-P152)
Gene ID:	940
Molecular Weight:	65-68 kDa

PROPERTIES	
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Biological Activity	Immobilized Human/Cynomolgus/Rhesus macaque CD28, mFc (IgG2a) Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-CD28 Antibody, hFc Tag with the EC <sub>50</sub> 14.5ng/ml determined by ELISA.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Normally 8% trehalose is added as protectant before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu\text{g}/\text{mL}$ in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

## DESCRIPTION

BackgroundCD28 protein plays a pivotal role in T-cell activation, promoting cell proliferation, cytokine production, and T-cell survival.<br/>Upon ligation with TCR/CD3 and CD40L costimulation, CD28 enhances the production of IL4 and IL10 in T-cells, contributing<br/>to immune response modulation. Additionally, isoform 3 of CD28 facilitates CD40L-mediated activation of NF-kappa-B and<br/>kinases MAPK8 and PAK2 in T-cells. The protein forms homodimers through disulfide linkages and interacts with various<br/>molecules, including DUSP14, CD80/B7-1, CD86/B7-2/B70, and GRB2. Isoform 3 specifically interacts with CD40LG,<br/>highlighting its multifaceted role in mediating immune responses and cellular signaling pathways.

## Caution: Product has not been fully validated for medical applications. For research use only.

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