

Cluster Of Differentiation 28 (CD28) Active Protein | CD28 active protein

Active Cluster Of Differentiation 28 (CD28)

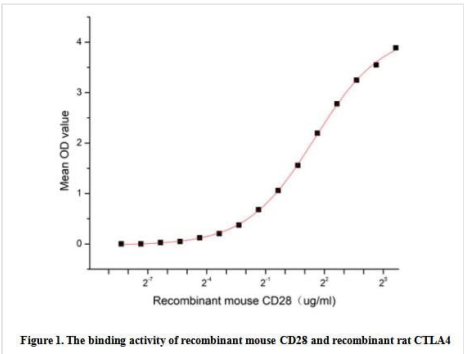
CATALOG # AAA161757	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Cluster Of Differentiation 28 (CD28); Active Cluster Of Differentiation 28 (CD28); Cluster Of Differentiation 28; Tp44; T-Cell-Specific Surface Glycoprotein4; CD28 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Asn20~Leu1 50
Applicable Applications for CD28 active protein	Activity Assay, Cell Culture
Species	Mouse
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	6.2
Research Area	CD & Adhesion molecule
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

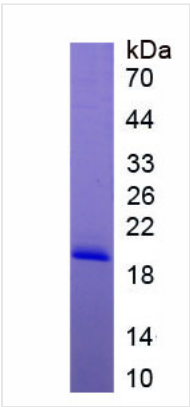


Bioactivity

The cluster of differentiation (CD) antigen CD28 is a central co-stimulatory molecule for TCR-mediated activation such as cytokine production and T-cell proliferation upon ligand binding and TCR stimulation. It is a member of the immunoglobulin subfamily, other members of the subfamily include ICOS, CTLA4, PD1, PD1H, TIGIT and BTLA. Cytotoxic T-Lymphocyte Associated Antigen 4 (CTLA4) and CD28 are highly homologous and compete for the same ligands, CTLA4 can also bind with CD28 to form a dimer. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse CD28 and recombinant rat CTLA4. Briefly, mCD28 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to CTLA4-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-CD28 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL stop solution to the wells and read at 450/630 nm immediately. The binding activity of recombinant mouse CD28 and recombinant rat CTLA4 was shown in Figure 1, the EC50 for this effect is 2.82 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for CD28 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	161484597
NCBI GeneID	12487
NCBI Accession #	NP_031668.3
NCBI GenBank Nucleotide #	NM_007642.4
UniProt Accession #	P31041; Q6GSH7
Molecular Weight	25,243 Da
NCBI Official Full Name	T-cell-specific surface glycoprotein CD28
NCBI Official Synonym Full Names	CD28 antigen
NCBI Official Symbol	Cd28
NCBI Protein Information	T-cell-specific surface glycoprotein CD28
UniProt Protein Name	T-cell-specific surface glycoprotein CD28
UniProt Gene Name	Cd28

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.