TECHNICAL DATA SHEET

CD28 MAb

Catalog Number: CSB0012

DESCRIPTION

Target:	CD28
Target aliases:	TP44
Fc isotype:	IgG2a
Membrane proteome specificity:	Monospecific for 6,000 membrane proteins tested
Species reactivity:	Human (Others untested)
Extracellular epitope:	Yes
Fc modifications:	C-terminal Avitag[1], disabled Fc-γ receptor binding[2]
Source:	Recombinant CHO expression; purified by Protein A chromatography
Formulation:	Endotoxin Free PBS pH 7.4, sterile-filtered
Concentration:	1 mg/ml

1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc-γ receptor binding site to minimize non-specific antibody binding.

CD28 TARGET INFORMATION

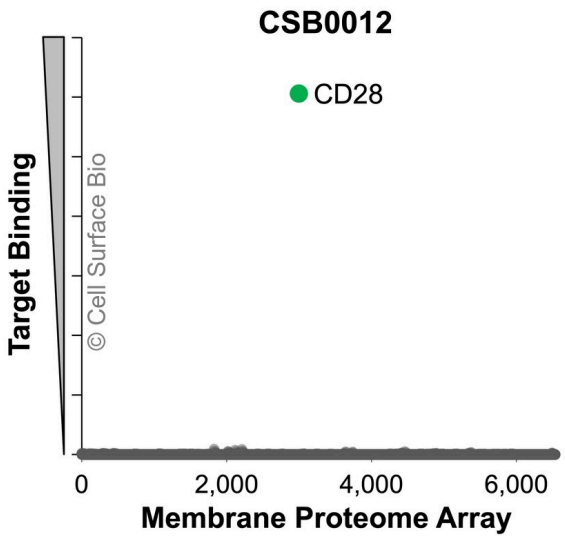
CD28 is a single-pass transmembrane protein and cell surface glycoprotein that is required for T-cell proliferation and survival, cytokine production, and T-helper type-2 development. (NCBI Gene: 940, UniProtKB/Swiss-Prot: P10747) Other names: TP44

SHIPPING AND STORAGE

Shipping:	Shipped at ambient temperature. Store at 4°C.
Stability & Storage:	Stable for 12 months from date of receipt when stored at 4°C. Avoid repeated freeze-thaw cycles.

VALIDATION DATA

Membrane Proteome Specificity

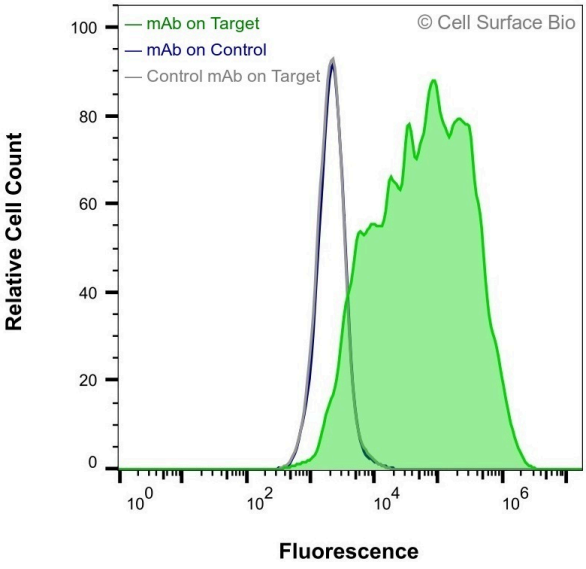


The specificity of CD28 Monoclonal Antibody (CSB0012) was tested on the Membrane Proteome Array™ and shown to be specific for CD28.

The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed human cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies and other protein ligands.

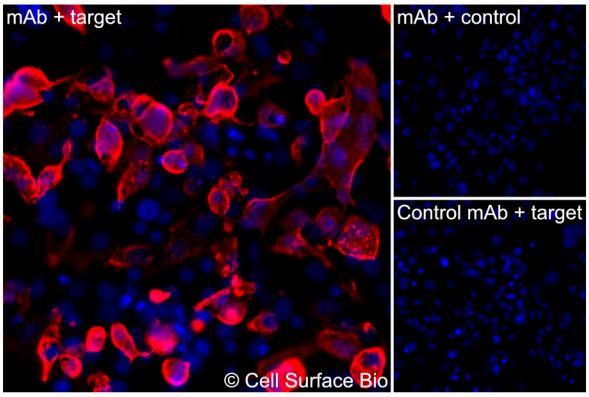
www.cellsurfacebio.com info@cellsurfacebio.com +1 (215) 987-0728

Applications	Conditions	Recommended concentration
Flow Cytometry, Extracellular	Live, Unpermeabilized	1 µg/ml



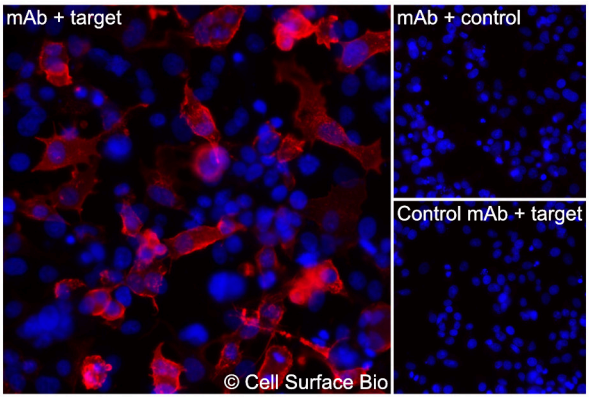
HEK-293F cells transiently transfected with CD28 were stained with CD28 Monoclonal Antibody (CSB0012) (green) or isotype control antibody (gray), followed by AlexaFluor 647- conjugated anti- IgG secondary antibody. HEK-293F cells transiently transfected with an empty control vector were also stained with CD28 Monoclonal Antibody (CSB0012) (blue).

Applications	Conditions	Recommended concentration
Immunofluorescence, Extracellular	Fixed 4% paraformaldehyde	1 µg/ml



(Left) COS-7 cells transiently transfected CD28 were stained with CD28 Monoclonal Antibody (CSB0012) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) COS-7 cells transiently transfected with an empty control vector stained with CD28 Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with CD28 and stained with control MAb.

Applications	Conditions	Recommended concentration
Immunofluorescence, Intracellular	Fixed 4% paraformaldehyde, Permeabilized 0.1% Triton X-100	1 µg/ml



(Left) COS-7 cells transiently transfected CD28 were permeabilized and stained with CD28 Monoclonal Antibody (CSB0012) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) COS-7 cells transiently transfected with an empty control vector stained with CD28 Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with {{target} and stained with control MAb.