

DESCRIPTION

Target:	CD80
Target aliases:	CD28LG1, CD28LG, B7.1, B7-1, LAB7, BB1, B7
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

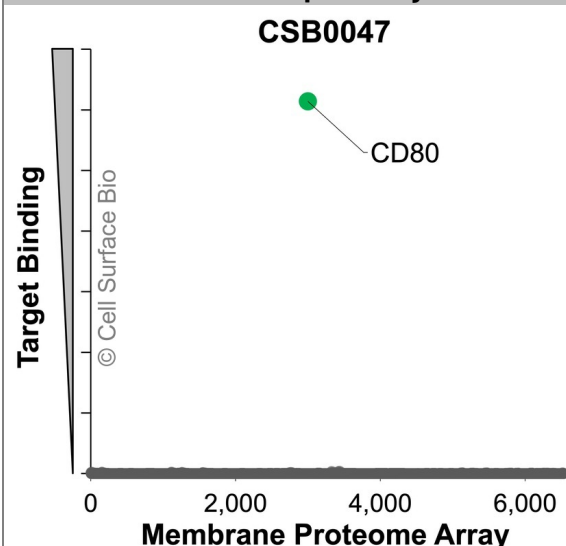
1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc-γ receptor binding site to minimize non-specific antibody binding.

CD80 TARGET INFORMATION

CD80 is a single-pass transmembrane protein. CD80 can be activated by binding either CD28 or CTLA4, each resulting in different effects. When activated by CD28, CD80 induces T-cell proliferation and cytokine production. When activated by CTLA4, CD80 inhibits T-cell activation. CD80 is also an adenovirus subgroup B receptor and may be involved in lupus neuropathy. (NCBI Gene: 941, UniProtKB/Swiss-Prot: P33681) Other names: CD28LG1, CD28LG, B7.1, B7-1, LAB7, BB1, B7

SHIPPING AND STORAGE

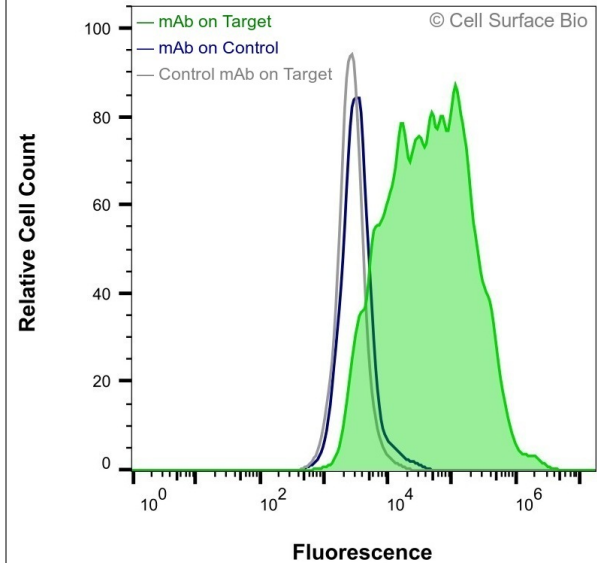
Shipping:	Shipped at ambient temperature. Store at 4°C.
Stability & Storage:	Stable for 12 months from date of receipt when stored at 4°C. Avoid repeated freeze-thaw cycles.

VALIDATION DATA
Membrane Proteome Specificity


The specificity of CD80 Monoclonal Antibody (CSB0047) was tested on the Membrane Proteome Array™ and shown to be specific for CD80.

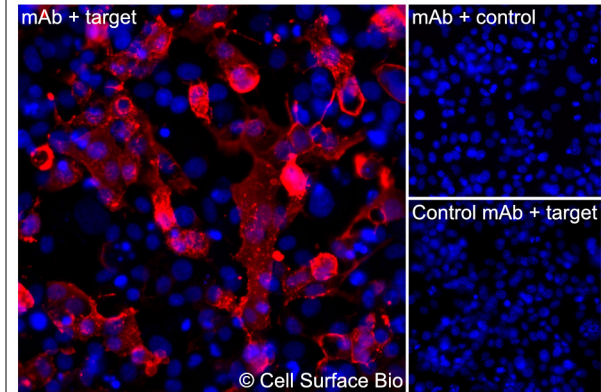
The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed avian cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies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

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



HEK-293F cells transiently transfected with CD80 were stained with CD80 Monoclonal Antibody (CSB0047)(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 CD80 Monoclonal Antibody (CSB0047)(blue).

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



(Left) COS-7 cells transiently transfected CD80 were stained with CD80 Monoclonal Antibody (CSB0047) 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 CD80 Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with CD80 and stained with control MAb.

Applications

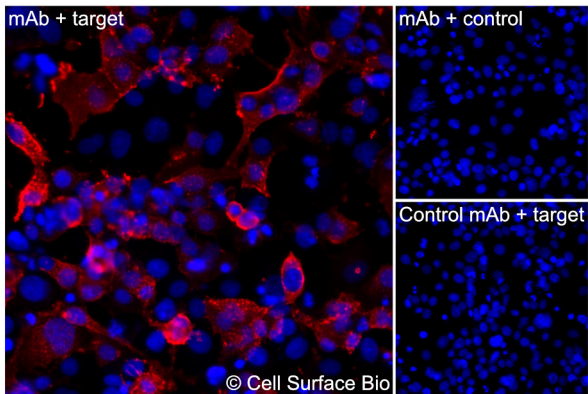
Immunofluorescence, Intracellular

Conditions

Fixed 4% paraformaldehyde,
Permeabilized 0.1% Triton X-100

Recommended concentration

1 µg/ml



(Left) COS-7 cells transiently transfected CD80 were permeabilized and stained with CD80 Monoclonal Antibody (CSB0047) 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 CD80 Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with {{target}} and stained with control MAb.