

DESCRIPTION

Target:	MPL
Target aliases:	C-MPL, CD110, MPLV, THCYT2, THPOR, TPOR
Fc isotype:	Mouse 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

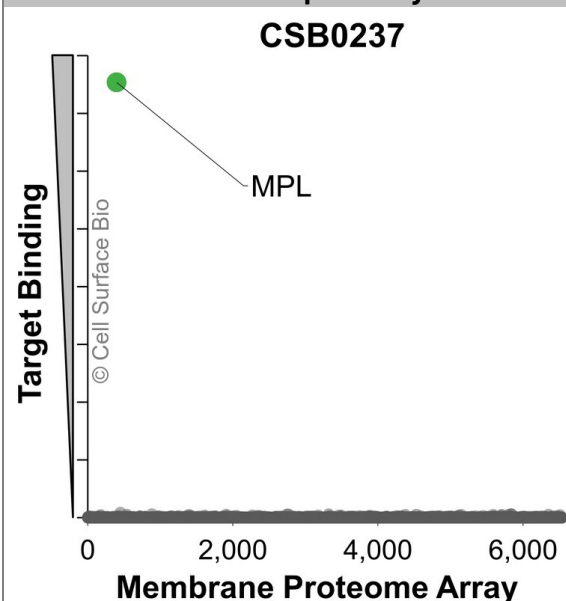
1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc-γ receptor binding site to minimize non-specific antibody binding.

MPL TARGET INFORMATION

Thrombopoietin receptor (MPL) is a type I transmembrane protein belonging to the class I cytokine receptor family. It is primarily expressed on hematopoietic stem cells, megakaryocyte progenitors, and platelets, where it mediates signaling in response to its ligand thrombopoietin (THPO) to regulate platelet production and stem cell maintenance. The extracellular domain contains two cytokine receptor homology regions responsible for ligand binding, while the intracellular domain associates with JAK2 to activate downstream signaling pathways. MPL plays a central role in megakaryopoiesis and hematopoietic homeostasis. (NCBI Gene: 4352, UniProtKB/Swiss-Prot: P40238) Other names: C-MPL, CD110, MPLV, THCYT2, THPOR, TPOR

SHIPPING AND STORAGE

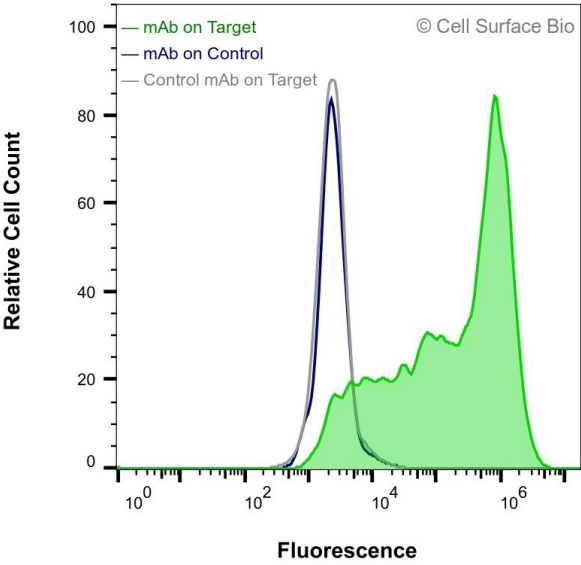
Shipping:	Shipped at ambient temperature. Store at 4°C.
Stability & Storage:	Stable for 12 months from date of receipt when stored at 4°C. Avoid repeated freeze-thaw cycles.

VALIDATION DATA
Membrane Proteome Specificity


The specificity of MPL Monoclonal Antibody (CSB0237) was tested on the Membrane Proteome Array™ and shown to be specific for MPL.

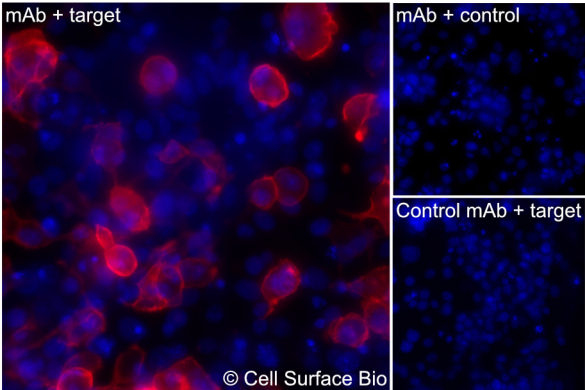
The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed Human cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies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

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



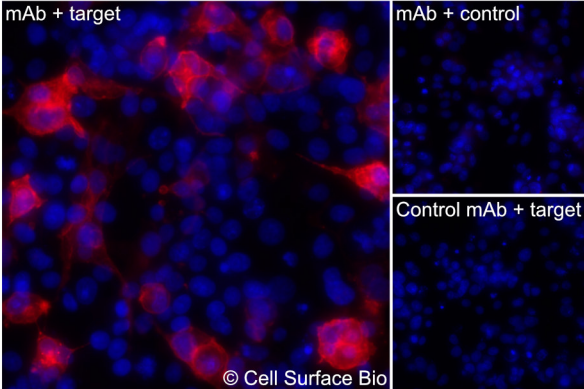
HEK-F cells transiently transfected with MPL were stained with MPL Monoclonal Antibody (CSB0237)(green) or isotype control antibody (gray), followed by AlexaFluor 647- conjugated anti- IgG secondary antibody. HEK-F cells transiently transfected with an empty control vector were also stained with MPL Monoclonal Antibody (CSB0237)(blue).

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



(Left) COS-7 cells transiently transfected MPL were stained with MPL Monoclonal Antibody (CSB0237) 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 MPL Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with MPL 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 MPL were permeabilized and stained with MPL Monoclonal Antibody (CSB0237) 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 MPL Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with {{target}} and stained with control MAb.