

## DESCRIPTION

|                                       |                                                                                      |
|---------------------------------------|--------------------------------------------------------------------------------------|
| <b>Target:</b>                        | LIM2                                                                                 |
| <b>Target aliases:</b>                | Lens Intrinsic Membrane Protein 2, MP19, MP17                                        |
| <b>Fc isotype:</b>                    | IgG2a                                                                                |
| <b>Membrane proteome specificity:</b> | Monospecific for 6,000 membrane proteins tested                                      |
| <b>Species reactivity:</b>            | Human (Others untested)                                                              |
| <b>Extracellular epitope:</b>         | Yes                                                                                  |
| <b>Fc modifications:</b>              | C-terminal Avitag <sup>1</sup> , disabled Fc- $\gamma$ receptor binding <sup>2</sup> |
| <b>Source:</b>                        | Recombinant CHO expression; purified by Protein A chromatography                     |
| <b>Formulation:</b>                   | Endotoxin Free PBS pH 7.4, sterile-filtered                                          |
| <b>Concentration:</b>                 | 1 mg/ml                                                                              |

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

## LIM2 TARGET INFORMATION

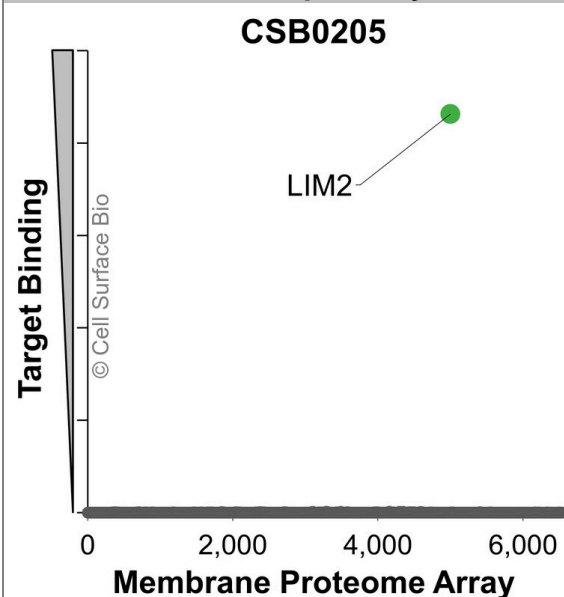
Lens intrinsic membrane protein 2 is a member of the PMP-22/EMP/MP20/Claudin superfamily of tetra-span transmembrane proteins and is predominantly expressed in lens fiber cells of the eye. The protein contains four transmembrane helices with cytoplasmic N- and C-termini and contributes to membrane organization within the ocular lens. LIM2 supports maintenance of lens transparency and normal lens structure. Expression profiling shows highly enriched expression in lens tissue. (NCBI Gene: 3982, UniProtKB/Swiss-Prot: P55344) Other names: Lens Intrinsic Membrane Protein 2, MP19, MP17

## SHIPPING AND STORAGE

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

## VALIDATION DATA

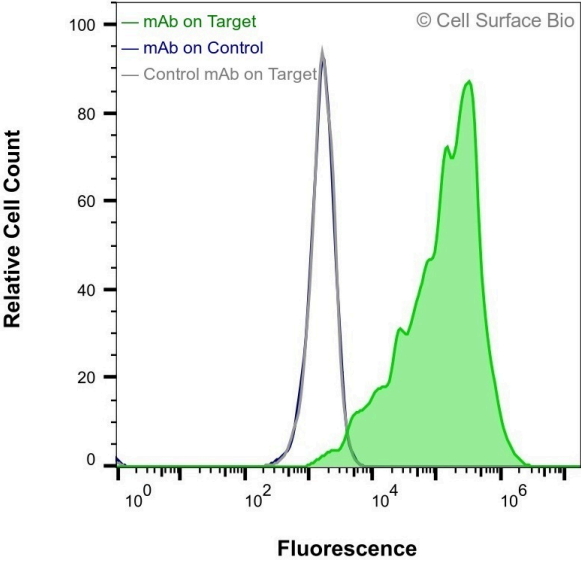
### Membrane Proteome Specificity



The specificity of LIM2 Monoclonal Antibody (CSB0205) was tested on the Membrane Proteome Array™ and shown to be specific for LIM2.

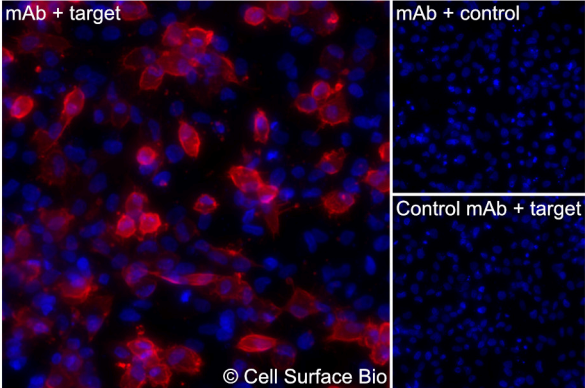
The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed human cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies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

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



JS-1 cells transiently transfected with LIM2 were stained with LIM2 Monoclonal Antibody (CSB0205) (green) or isotype control antibody (gray), followed by AlexaFluor 647- conjugated anti- IgG secondary antibody. JS-1 cells transiently transfected with an empty control vector were also stained with LIM2 Monoclonal Antibody (CSB0205) (blue).

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



(Left) JS-1 cells transiently transfected LIM2 were stained with LIM2 Monoclonal Antibody (CSB0205) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) JS-1 cells transiently transfected with an empty control vector stained with LIM2 Monoclonal Antibody. (Bottom right) Isotype control: JS-1 cells transfected with LIM2 and stained with control MAb.

**Applications**

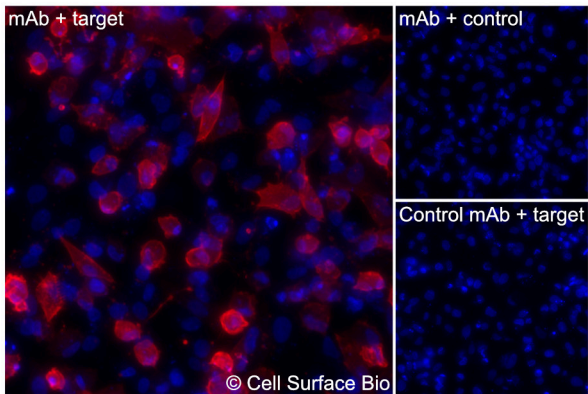
Immunofluorescence, Intracellular

**Conditions**

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

**Recommended concentration**

1 µg/ml



(Left) JS-1 cells transiently transfected LIM2 were permeabilized and stained with LIM2 Monoclonal Antibody (CSB0205) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) JS-1 cells transiently transfected with an empty control vector stained with LIM2 Monoclonal Antibody. (Bottom right) Isotype control: JS-1 cells transfected with {{target}} and stained with control MAb.