

## Recombinant Anti-PROM1 Antibody (V3S-0622-YC2494)

Cat. No.: V3S-0622-YC2494

### Summary

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| <b>Description</b>        | <p>This product is a monoclonal antibody derived from mouse, which can specifically recognize PROM1. The antibody is expressed with mammalian cell transient expression system, serum-free and purified by affinity chromatography. The purity and integrity are tested via SDS-PAGE and SEC-HPLC analysis. Given an antigen, additional QC measures are also desired such as affinity testing and binding validation.</p> <p>Specifically, the antibody is provided in multiple formats for in vivo and in vitro assays. The <i>In vivo</i> version features greater than 95% purity, ultra-low endotoxin levels (&lt;1 EU/mg or 0.1 E U/mg), and is preservative, stabilizer, and carrier protein-free.</p> |
| <b>Clonality</b>          | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Host Species</b>       | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Target Species</b>     | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Isotype</b>            | IgG1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Isotype Control</b>    | C60052; C51237                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Secondary Antibody</b> | C47504; C37557; C41360; C32672; C10001                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

### Property

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|---------------------------|-----------------------------------------------------------------------------|
| <b>Expression Species</b> | HEK293F or CHO                                                              |
| <b>Conjugation</b>        | None                                                                        |
| <b>Purity</b>             | >95%, determined by SDS-PAGE and/or SEC-HPLC                                |
| <b>Endotoxin</b>          | <1 EU/mg, determined by LAL method                                          |
| <b>Purification</b>       | Protein A affinity purified                                                 |
| <b>Sterility</b>          | 0.2 µM filtered                                                             |
| <b>Formulation</b>        | PBS, pH 7.4                                                                 |
| <b>Preservation</b>       | No preservatives                                                            |
| <b>Stabilizer</b>         | No stabilizers                                                              |
| <b>Storage</b>            | Store at 4°C within a week. For longer storage, aliquot and store at -20°C. |

### Applications

For lab research use only, not for diagnostic, therapeutic or any *in vivo* human use.

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**Application** ELISA

**Application Notes** The antibody is recommended for detection of PROM1 by ELISA assay.

## Target

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**Target** PROM1

**Alternative Name** PROM1; prominin 1; RP41; AC133; CD133; MCDR2; STGD4; CORD12; PROML1; MSTP06 1; prominin-1; hProminin; antigen AC133; prominin-like protein 1; hematopoietic stem cell antigen

**Gene ID** [8842](#)

**UniProt** [Q43490](#)

**Introduction** This is a pentaspan transmembrane glycoprotein. The protein localizes to membrane protrusions and is often expressed on adult stem cells, where it is thought to function in maintaining stem cell properties by suppressing differentiation. Mutations in this gene have been shown to result in retinitis pigmentosa and Stargardt disease. Expression of This is also associated with several types of cancer. This gene is expressed from at least five alternative promoters that are expressed in a tissue-dependent manner. Multiple transcript variants encoding different isoforms have been found for this gene.

**Research Area** Neuroscience

**Proceedings of R&D** Diseases associated with PROM1 include Macular Dystrophy, Retinal, 2 and Cone-Rod Dystrophy 12. Among its related pathways are Embryonic and Induced Pluripotent Stem Cell Differentiation Pathways and Lineage-specific Markers and Transcriptional misregulation in cancer. Gene Ontology (GO) annotations related to this gene include cadherin binding and actinin binding. An important paralog of this gene is PROM2.

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