

Anti-PROM1 Neutralizing Antibody (V3S-0622-YC2489)

Cat. No.: V3S-0622-YC2489

Summary

Description	This product is a human monoclonal antibody that reacts with 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. 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 (<1 EU/mg or 0.1 EU/mg), and is preservative, stabilizer, and carrier protein-free.
Clonality	Monoclonal
Host Species	Human
Target Species	Mouse
Isotype	IgG1 kappa
Isotype Control	C67002
Secondary Antibody	C32400; C75370; C10513; C51635; C45530

Property

Expression Species	HEK293F or CHO
Conjugation	None
Purity	>95%, determined by SDS-PAGE and/or SEC-HPLC
Endotoxin	<1 EU/mg, determined by LAL method
Purification	Protein A affinity purified
Sterility	0.2 µM filtered
Formulation	PBS, pH 7.4
Preservation	No preservatives
Stabilizer	No stabilizers
Storage	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.

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

Target

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 a Iso 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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