P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

CD133 / Prominin (Cancer Stem Cell Marker); Clone PROM/1510
(Concentrate)

Availability/Contents:

Item #	Volume
RA0759-C.1	0.1 ml
RA0759-C.5	0.5 ml
RA0759-C1	1 ml

Description:

Species:	Mouse
Immunogen:	Recombinant chimeric PROM1 protein (around aa180-380 and aa612-765). This Mab recognizes both glycosylated and non-glycosylated extracellular domains of CD133.
Clone:	PROM/1510
Isotype:	IgG2 / Kappa
Entrez Gene ID:	8842
Hu Chromosome Loc.:	4p15.32
Synonyms:	Prominin-1, Antigen AC133, Prominin-like protein 1, Antigen AC133; CORD12; Hematopoietic stem cell antigen; hProminin; MCDR2; PROM1; Prominin like protein 1 precursor; PROML1; RP41; STGD4
Mol. Weight of Antigen:	97kDa
Format:	200ug/ml of antibody purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Specificity:	Recognizes a protein of 97kDa, identified as CD133 or Prominin.
Background:	CD133, also known as PROML1 or Prominin, is a stem cell antigen that may be useful for the selection and expansion of hematopoietic cells and may be used as a positive marker for the characterization of trophoblast cell lines. The human CD133 gene maps to chromosome 4p15.32 and encodes an 865 amino acid protein. The CD133 gene codes for a pentaspan transmembrane glycoprotein that is expressed on primitive hematopoietic stem, progenitor, retinoblastoma, hemangioblasts and neural stem cells and developing epithelium. The 5-TM structure includes an extracellular N-terminus, two short intra- cellular loops, two large extracellular loops and an intracellular C-terminus. CD133 is a candidate gene for retinal proteins that are targeted to plasma membrane protrusions. These retinal proteins, including CD133, may influence the shedding of photoreceptive membranes from the terminal end of the outer segments of vertebrate photoreceptors, where they are phagocytosed by the retinal pigment epithelium, and represent candidates for inherited retinal degenerations.
Species Reactivity:	Human
Positive Control:	Human Tonsil.
Cellular Localization:	Cell membrane, Cell projection, Cilium, Endoplasmic reticulum.
Titer/ Working Dilution:	Immunohistochemistry (Frozen and Formalin-fixed): 1-2µg/ml
Microbiological State:	This product is not sterile.

Storage: 2° C  8° C

ScyTek Laboratories, Inc.
205 South 600 West
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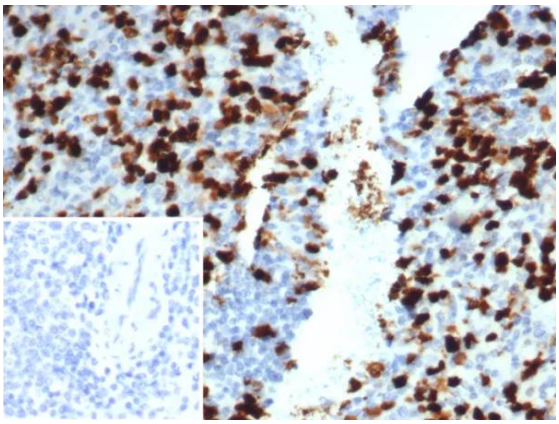
Uses/Limitations:

Not to be taken internally.
For Research Use Only.
This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
Do not use if reagent becomes cloudy.
Do not use past expiration date.
Non-Sterile.

Ordering Information and Current Pricing at www.scytek.com



Formalin-fixed, paraffin-embedded spleen stained with CD133 / Prominin Mouse Monoclonal Antibody (PROM/1510).

Procedure:

1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Tris-EDTA Solution (10x) pH 9.0 (ScyTek catalog# TES500) or Citrate Plus (10x) HIER Solution (ScyTek catalog# CPL500).

2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.

3. **Visualization:** For maximum staining intensity we recommend the “UltraTek HRP Anti-Polyvalent Lab Pack” (ScyTek catalog# UHP125, see IFU for instructions) combined with the “DAB Chromogen/Substrate Bulk Pack (High Contrast)” (ScyTek catalog# ACV500, see IFU for instructions).

Precautions:

Contains Sodium Azide as a preservative (0.09% w/v).
Do not pipette by mouth.
Avoid contact of reagents and specimens with skin and mucous membranes.
Avoid microbial contamination of reagents or increased nonspecific staining may occur.
This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

References:

1. Ohlfest JR. Journal of immunological methods 361.1-2 (2010 Sep 30): 110-5. (WB, IF, FACS, IHC)
2. Vallera DA. Gynecologic oncology 130.3 (2013 Sep): 579-87.

Warranty:

No products or “Instructions For Use (IFU)” are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

Storage: 2° C 8° C

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