

Datasheet for 600-101-MH4S**Mash1/Ascl1 Antibody****Overview**

Description:	Anti-Mash1/Ascl1 (GOAT) Antibody - 600-101-MH4S
Item No.:	600-101-MH4S
Size:	25 µL
Applications:	IHC, WB
Reactivity:	Human, Mouse
Host Species:	Goat

Product Details

Background: Ascl1 (Achaete-scute homolog 1) is a transcription factor that plays a key role in neuronal differentiation, it acts as a pioneer transcription factor, accessing closed chromatin to allow other factors to bind and activate neural pathways. It directly binds the E box motif (5'-CANNTG-3') on promoters and promotes transcription of neuronal genes. The combination of three transcription factors, ASCL1, POU3F2/BRN2 and MYT1L, is sufficient to reprogram fibroblasts and other somatic cells into induced neuronal (iN) cells in vitro. Ascl1 plays a role at early stages of development of specific neural lineages in most regions of the CNS, and of several lineages in the PNS. It is essential for the generation of olfactory and autonomic neurons. It acts synergistically with FOXN4 to specify the identity of V2b neurons rather than V2a from bipotential p2 progenitors during spinal cord neurogenesis, probably through DLL4-NOTCH signaling activation. Anti-Mash1/Ascl1 Antibody is useful for researchers interested in CCHS, SIDS, Dopaminergic Neurogenesis, and DNA binding.

Synonyms:	Goat Anti-Ascl1 Antibody, Goat Anti-Mash1 Antibody, Achaete-scute homolog 1, ASH-1, mASH-1
Host Species:	Goat
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Ascl1
Reactivity:	Human, Mouse

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Mash1/Ascl1 antibody was prepared from whole goat serum produced by repeated immunizations with a synthetic peptide corresponding to an internal portion of mouse Mash1/Ascl1 conjugated to Keyhole Limpet Hemocyanin (KLH).
Purity/Specificity:	This affinity purified antibody is directed against mouse Mash1/Ascl1. This product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross-reactivity with the antigen based on 100% homology with the immunizing sequence to mouse and rat, and 93% homology with human.
Relevant Links:	• UniProtKB - Q02067 • NCBI - NP_032579.2 • GenelD - 17172

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Mash1/Ascl1 Antibody has been tested in Western Blot and Immunohistochemistry. Expect a band at ~24.7 kDa in western blot using appropriate lysates or tissues. Positive control used was mouse pancreas in WB, human thyroid papillary carcinoma tissue in IHC.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000-1:50,000
IHC:	1:1000
WB:	1:1000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.05 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

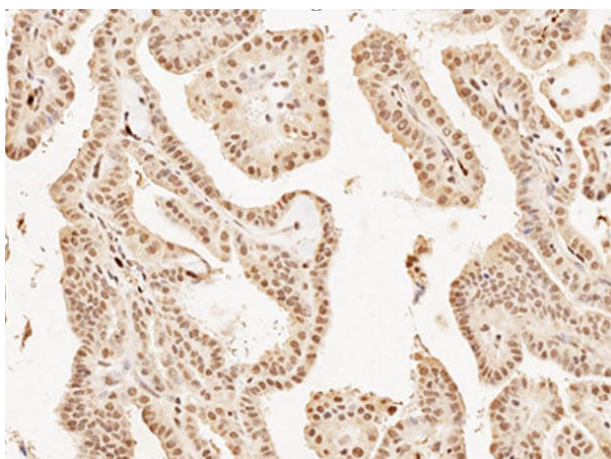
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.

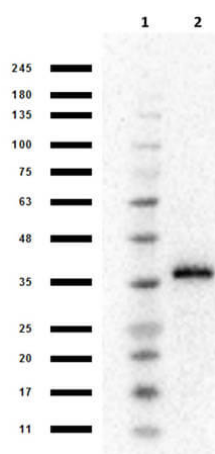
Expiration: Expiration date is one (1) year from date of receipt.

Images



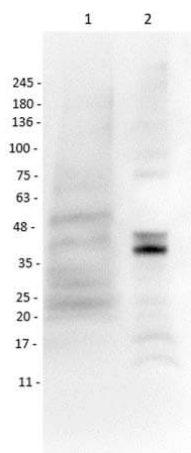
Immunohistochemistry

Immunohistochemistry of Goat Anti-Mash1/Ascl1 Antibody. Tissue: Human Thyroid Papillary Carcinoma Tissue. Fixative: none. Antigen Retrieval: HEIR pH6. Primary Antibody: Anti-Mash1/Ascl1 at 1:1000. Counterstain: Hematoxylin. The Abs developed intense nucleus staining in human thyroid papillary cancer tissue.



Western Blot

Western Blot of Goat Anti-Mash1/Ascl1 Antibody. Lane 1: Opal Pre-Stained Molecular Weight Marker (p/n MB-210-0500). Lane 2: MASH1/ASCL1 Human recombinant protein C-MYC/DDK-tagged (50ng) [+]. Primary Antibody: Anti-Mash1/Ascl1 at 1:1000 overnight at 2-8°C. Secondary Antibody: Donkey Fab2 Anti-Goat H&L mx8 HRP at 1:5000 at RT for 1hr. Blocking Buffer: BlockOut® - Universal Blocking Buffer for Western Blotting (p/n MB-073). Expect: 24.7kDa, ~37kDa recombinant.



Western Blot

Western Blot of Goat Anti-Mash1/Ascl1 Antibody. Opal Pre-Stained Molecular Weight Marker (p/n MB-210-0500). Lane 1: Mouse Pancreas (35µg) (p/n W10-000-T023) [-]. Lane 2: SH-SY5Y whole cell lysate (35µg) [+]. Primary Antibody: Anti-Mash1/Ascl1 at 1:1000 overnight at 2-8°C. Secondary Antibody: Rabbit Anti-Goat IgG HRP (p/n 605-4313) at 1:5000 at RT for 1hr. Blocking Buffer: BlockOut® - Universal Blocking Buffer for Western Blotting (p/n MB-073). Expect: 24.7kDa, observed ~37kDa.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.