10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ASCL2 antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI11065

Specification

ASCL2 antibody - middle region - Product Information

Application	**WB**
Primary Accession	O35885
Other Accession	NM_008554, NP_032580
Reactivity	**Human, Mouse, Rat, Rabbit, Zebrafish, Bovine, Dog**
Predicted	**Mouse, Rat, Pig, Chicken, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**29kDa KDa**

ASCL2 antibody - middle region - Additional Information

Gene ID 17173

Alias Symbol	**Mash2, bHLHa45, 2410083I15Rik**

Other Names
Achaete-scute homolog 2, ASH-2, mASH-2, mASH2, Ascl2, Mash2

Format
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage
Add 100 ul of distilled water. Final anti-ASCL2 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions
ASCL2 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

ASCL2 antibody - middle region - Protein Information

Name Ascl2

Synonyms Mash2

Function
Transcription factor (PubMed:10611232, PubMed:29500235). Binds to E-box motifs 5'-CANNTG-3' in the regulatory elements of target genes, probably as a heterodimer with another basic helix-loop-helix (bHLH) protein such as the transcription factor TCF3 (PubMed:10611232, PubMed:<a href="http://www.uniprot.org/citations/29500235"

target="_blank">29500235). May bind both open and closed chromatin, acting as a pioneer transcription factor to allow other factors to bind and activate lineage-specific genes (PubMed:29500235). Required during post-implantation development for the generation of some differentiated trophoblast cell types (PubMed:8090202). Transcriptional activity of ASCL2 may be antagonised in a subset of trophoblast cells by bHLH transcription factor HAND1, perhaps by competing for dimerization with other bHLH proteins (PubMed:10611232). Involved in differentiation and function of follicular T-helper (Tfh) cells, thereby playing a role in germinal center responses; probably modulates expression of genes involved in Tfh cell function, such as BCL6 (PubMed:24463518). May also act as a suppressor of Th1-, Th2- and Th17-cell differentiation (PubMed:24463518). Induces the formation of stem cells in intestinal crypts in vitro, synergistically activating transcription of target genes, such as SOX9, together with TCF4/beta-catenin (PubMed:25620640). May form a bistable transcriptional switch, controlling expression of its own gene together with Wnt/R-spondin signaling, and thereby maintaining stem cell characteristics (PubMed:25620640). Modulates expression of target genes, including perhaps down-regulating EGR1/Krox24 and chemokine CXCL10/Mob-1 and up-regulating CXCR4 and CDKN1C/p57kip2, in Schwann cells (By similarity). May play a role in reducing proliferation of Schwann cells, perhaps acting via modulation of expression of CDKN1C (By similarity). May be dispensable for blastocyst formation and later embryonic function (PubMed:8090202, PubMed:9622625). May be involved in the determination of neuronal precursors (By similarity).

Cellular Location
Nucleus {ECO:0000250|UniProtKB:P19360}.

Tissue Location
Expressed in follicular T-helper (Tfh) cells.

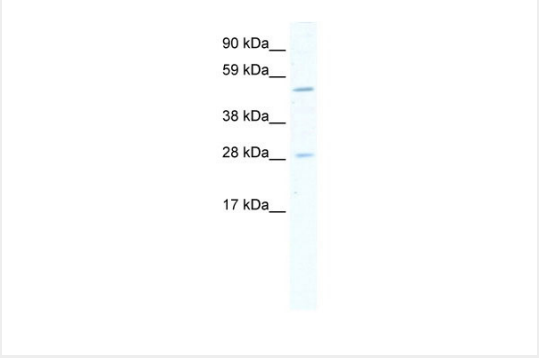
ASCL2 antibody - middle region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ASCL2 antibody - middle region - Images

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WB Suggested Anti-ASCL2 Antibody Titration: 5.0µg/ml
ELISA Titer: 1:312500
Positive Control: Human Small intestine

ASCL2 antibody - middle region - References

Georgiades,P. (2006) Development 133 (6), 1059-1068Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.