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ASCL2 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI11065

Product Information

Application	WB
Primary Accession	O35885
Other Accession	NM_008554, NP_032580
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Dog, Bovine
Predicted	Mouse, Rat, Pig, Chicken, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	27784

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.

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: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).

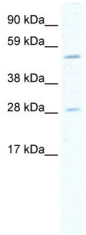
Cellular Location Nucleus {ECO:0000250|UniProtKB:P19360}.

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

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.

Images



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