

ASCL2 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10976A**Specification**

ASCL2 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	Q99929
Other Accession	Q90259 , P19360 , O35885 , Q2EGB9 , Q06234 , P19359 , Q02067 , P50553 , NP_005161.1
Reactivity	Human, Mouse
Predicted	Rat, Xenopus, Bovine, Zebrafish
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	20185
Antigen Region	38-65

ASCL2 Antibody (N-term) - Additional Information**Gene ID** 430**Other Names**

Achaete-scute homolog 2, ASH-2, hASH2, Class A basic helix-loop-helix protein 45, bHLHa45, Mash2, ASCL2, BHLHA45, HASH2

Target/Specificity

This ASCL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 38-65 amino acids from the N-terminal region of human ASCL2.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ASCL2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ASCL2 Antibody (N-term) - Protein Information**Name** ASCL2

Synonyms BHLHA45, HASH2

Function Transcription factor. 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. May bind both open and closed chromatin, acting as a pioneer transcription factor to allow other factors to bind and activate lineage-specific genes. Required during post-implantation development for the generation of some differentiated trophoblast cell types. 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. 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. May also act as a suppressor of Th1-, Th2- and Th17-cell differentiation. 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. May form a bistable transcriptional switch, controlling expression of its own gene together with Wnt/R- spondin signaling, and thereby maintaining stem cell characteristics (By similarity). 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. 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 (By similarity). May be involved in the determination of neuronal precursors (By similarity).

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00981, ECO:0000269|PubMed:11440538}

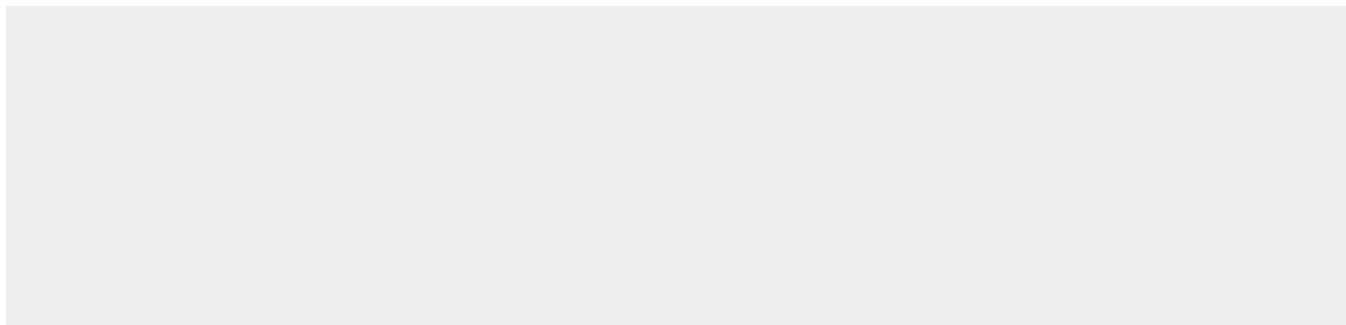
Tissue Location

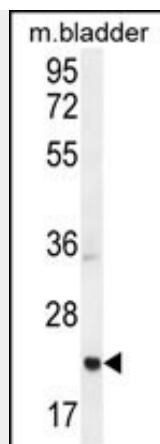
Expressed in the placenta at a stage between the first and second trimesters and when it matures, at about 32-36 weeks (PubMed:12099555). Expressed in the extravillous trophoblasts, the intermediate trophoblasts, and at lower levels in the cytotrophoblasts and stroma of chorionic villi of the developing placenta (PubMed:9175731, PubMed:12099555). Expressed in follicular T-helper (Tfh) cells (PubMed:24463518).

ASCL2 Antibody (N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

ASCL2 Antibody (N-term) - Images



ASCL2 Antibody (N-term) (Cat. #AP10976a) western blot analysis in mouse bladder tissue lysates (35ug/lane). This demonstrates the ASCL2 antibody detected the ASCL2 protein (arrow).

ASCL2 Antibody (N-term) - Background

This gene is a member of the basic helix-loop-helix (BHLH) family of transcription factors. It activates transcription by binding to the E box (5'-CANNTG-3'). Dimerization with other BHLH proteins is required for efficient DNA binding. Involved in the determination of the neuronal precursors in the peripheral nervous system and the central nervous system.

ASCL2 Antibody (N-term) - References

Stange, D.E., et al. Gut 59(9):1236-1244(2010)
Eeles, R.A., et al. Nat. Genet. 41(10):1116-1121(2009)
Barrett, J.C., et al. Nat. Genet. 41(6):703-707(2009)
Shahib, M.N., et al. J Reprod Med 51(11):892-896(2006)
Jubb, A.M., et al. Oncogene 25(24):3445-3457(2006)