

# **ASCL1 Polyclonal Antibody**

Catalog # AP74090

### **Product Information**

**Application** IHC-P **Primary Accession** P50553

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW25454

#### **Additional Information**

Gene ID 429

Other Names Achaete-scute homolog 1 (ASH-1) (hASH1) (Class A basic helix-loop-helix

protein 46) (bHLHa46)

**Dilution** IHC-P~~IHC-p 1:50-200, ELISA 1:10000-20000

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

### **Protein Information**

Name ASCL1 (<u>HGNC:738</u>)

**Function** Transcription factor that plays a key role in neuronal differentiation: acts as

a pioneer transcription factor, accessing closed chromatin to allow other factors to bind and activate neural pathways. 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. 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. Essential for the generation of olfactory and autonomic neurons. 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. Involved in the regulation of neuroendocrine cell development in the

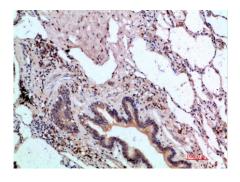
glandular stomach (By similarity).

**Cellular Location** Nucleus {ECO:0000250 | UniProtKB:Q02067}.

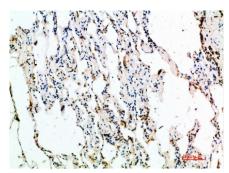
## **Background**

Transcription factor that plays a key role in neuronal differentiation: acts as a pioneer transcription factor, accessing closed chromatin to allow other factors to bind and activate neural pathways. 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. 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. Essential for the generation of olfactory and autonomic neurons. 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.

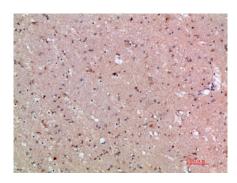
## **Images**



Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:200



Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:200



Immunohistochemical analysis of paraffin-embedded human-brain, antibody was diluted at 1:200

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.