bs-12349R **[Primary Antibody]**

ASCL2 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 430 **SWISS:** Q99929

Target: ASCL2

Immunogen: KLH conjugated synthetic peptide derived from Human ASCL2: 51-120/193.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Members of the myogenic determination family are basic helix-loop-helix (bHLH) proteins that can be separated into two classes, both of which work together to activate DNA transcription. Class A proteins include the ubiquitously expressed E-box binding factors, namely E2A, ITF-2 and HEB, while class B proteins, such as MyoD, myogenin and Neuro D (BETA2), are transiently expressed and exhibit a much more limited tissue distribution. Working in opposition to these positively acting factors are a specialized group of basic helix-loop-helix (bHLH) transcription factors that function as dominant negative regulators and are involved in cell lineage determination and differentiation. ASCL2 is a 193 amino acid protein that localizes to the nucleus and contains one bHLH domain. Expressed in developing placental tissue, ASCL2 binds to DNA and functions as a transcriptional regulator that is involved in the maturation of neuronal precursors in the peripheral and central nervous systems.

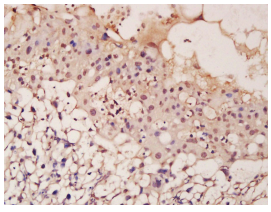
Applications: **IHC-P** (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (2ug/Test)
ICC/IF (1:100)

Reactivity: Human, Mouse (predicted: Rat, Pig, Cow, Chicken, Dog)

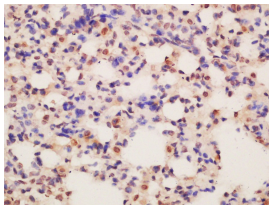
Predicted MW.: 22 kDa

Subcellular Location: Nucleus

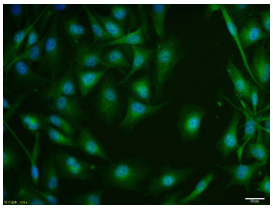
VALIDATION IMAGES



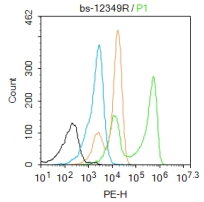
Tissue/cell: mouse placenta tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-ASCL2 Polyclonal Antibody, Unconjugated(bs-12349R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: mouse lung tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-ASCL2 Polyclonal Antibody, Unconjugated(bs-12349R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



MCF7 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (ASCL2) polyclonal Antibody, Unconjugated (bs-12349R) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Blank control:K562. Primary Antibody (green line): Rabbit Anti-ASCL2 antibody (bs-12349R) Dilution: 2μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody : Goat anti-rabbit IgG-PE Dilution: 1μg /test. Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at-20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=22.387]** Bu P et al. A miR-34a-Numb Feedforward Loop Triggered by Inflammation Regulates Asymmetric Stem Cell Division in Intestine and Colon Cancer. (2016) Cell.Stem.Cell. 18:189-202 IF ;Human&Mouse. 26849305
- **[IF=8.786]** Lei Wu. et al. ASCL2 Affects the Efficacy of Immunotherapy in Colon Adenocarcinoma Based on Single-Cell RNA Sequencing Analysis. FRONT IMMUNOL. 2022; 13: 829640 IHC ;Human. 35774798
- **[IF=9.1]** Yao Zhan. et al.Single-cell transcriptomics reveals intratumor heterogeneity and the potential roles of cancer stem cells and myCAFs in colorectal cancer liver metastasis and recurrence..CANCER LETTERS.2025 Mar 1:612:217452. mIHC ;Human. 39805388
- **[IF=6.244]** Zhang W. et al. Retinoic Acid-Induced 2 (RAI2) Is a Novel Antagonist of Wnt/β-Catenin Signaling Pathway and Potential Biomarker of Chemosensitivity in Colorectal Cancer.. Front Oncol. 2022 Mar;12:805290-805290 IHC ;Human. 35299743
- **[IF=5.108]** Mitkin NA et al. Protective C allele of the single-nucleotide polymorphism rs1335532 is associated with strong binding of Ascl2 transcription factor and elevated CD58 expression in B-cells.Biochim Biophys Acta Mol Basis Dis. 2018 Oct;1864(10):3211-3220. Other ;Human. 30006149