Human ASCL2/Mash2 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF6539

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ASCL2/Mash2 in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human ASCL2/Mash2 Met1-Ala49 Accession # Q99929
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

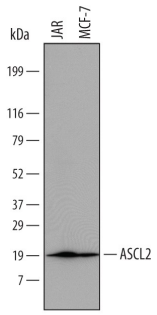
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

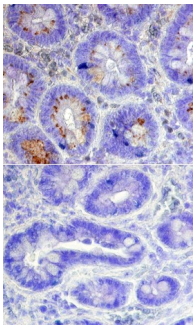
DATA

Western Blot



Detection of Human ASCL2/Mash2 by Western Blot. Western blot shows lysates of JAR human choriocarcinoma cell line and MCF-7 human breast cancer cell line. PVDF Membrane was probed with 1 µg/mL of Sheep Anti-Human ASCL2/Mash2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6539) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for ASCL2/Mash2 at approximately 20 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunohistochemistry



ASCL2/Mash2 in Human Intestine. ASCL2/Mash2 was detected in immersion fixed paraffin-embedded sections of human intestine using Sheep Anti-Human ASCL2/Mash2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6539) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hemotoxylin (blue). Lower panel shows a lack of labeling when primary antibodies are omitted and tissue is stained only with secondary antibody followed by incubation with detection reagents. Specific staining was localized to the base of intestinal crypts. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

ASCL2 (Achaete-scute like 2; also HASH2, bHLHa45 and Mash2) is a class II member of the HLH family of transcription factors. Its predicted MW is 20 kDa. ASCL2 shows restricted expression, being limited to intestinal Lgr5$^+$ stem cells and first trimester placental cytotrophoblasts. In the intestine, ASCL2 is under the control of Wnts and serves to maintain an epithelium stem cell pool. In the placenta, ASCL2 acts to maintain the pool of cytotrophoblasts at the expense of synctiotrophoblasts, thus promoting placental growth. Human ASCL2 is 193 amino acids (aa) in length. It contains one poly-Arg motif (aa 36-39), a DNA binding sequence (aa 53-63) and an HLH domain (aa 64-103). ASCL2 forms heterodimers with daughterless homologs (E22, E2A and HEB). Over aa 1-49, human ASCL2 shares 59% aa identity with mouse Mash2.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449