

ABHD7 (C-13): sc-138083

BACKGROUND

The α/β hydrolase superfamily comprise diverse members that are involved in important biochemical processes and related to various diseases. They have unrelated sequences, various substrates, and different kinds of catalytic activities, yet they share the same canonical α/β hydrolase fold, which consists of an eight-stranded parallel α/β structure. They are also characterized by a catalytic triad composed of a histidine, an acid and a nucleophile. Members of this superfamily are often drug targets for treating diseases, such as diabetes, Alzheimer's disease, obesity and blood clotting disorders. The α/β hydrolase domain containing (ABHD) gene subfamily is comprised of 15 mostly uncharacterized members, most of which utilize a serine nucleophile to form the G-X-S-X-G nucleophile elbow. ABHD7 is a 362 amino acid single-pass type II membrane protein that belongs to the AB hydrolase superfamily and the Epoxide hydrolase family.

REFERENCES

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- Miyata, K., et al. 2008. Elevated mature macrophage expression of human ABHD2 gene in vulnerable plaque. *Biochem. Biophys. Res. Commun.* 365: 207-213.
- Li, F., et al. 2008. An unannotated α/β hydrolase superfamily member, ABHD6 differentially expressed among cancer cell lines. *Mol. Biol. Rep.* 36: 691-696.

CHROMOSOMAL LOCATION

Genetic locus: EPHX4 (human) mapping to 1p22.1; Ephx4 (mouse) mapping to 5 E5.

SOURCE

ABHD7 (C-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of ABHD7 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138083 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ABHD7 (C-13) is recommended for detection of ABHD7 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ABHD family members.

ABHD7 (C-13) is also recommended for detection of ABHD7 in additional species, including equine and avian.

Suitable for use as control antibody for ABHD7 siRNA (h): sc-78819, ABHD7 siRNA (m): sc-140775, ABHD7 shRNA Plasmid (h): sc-78819-SH, ABHD7 shRNA Plasmid (m): sc-140775-SH, ABHD7 shRNA (h) Lentiviral Particles: sc-78819-V and ABHD7 shRNA (m) Lentiviral Particles: sc-140775-V.

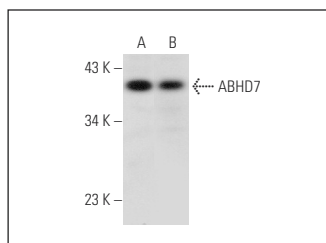
Molecular Weight of ABHD7: 42 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136 or KNRK whole cell lysate: sc-2214.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



ABHD7 (C-13): sc-138083. Western blot analysis of ABHD7 expression in HEK293 (A) and KNRK (B) whole cell lysates.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.