

# ABHD1 (A-13): sc-167034

## BACKGROUND

The  $\alpha/\beta$  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  $\alpha/\beta$  hydrolase fold, which consists of an eightstranded parallel  $\alpha/\beta$  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 Ab 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. ABHD1 is a 405 amino acid single-pass type II membrane protein that belongs to the AB hydrolase superfamily and the AB hydrolase 4 family. Ubiquitously expressed, ABHD1 plays a role in metabolizing smoking xenobiotics.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ABHD1 (human) mapping to 2p23.3; Abhd1 (mouse) mapping to 5 B1.

## SOURCE

ABHD1 (A-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ABHD1 of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-167034 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ABHD1 (A-13) is recommended for detection of ABHD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ABHD family members.

ABHD1 (A-13) is also recommended for detection of ABHD1 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for ABHD1 siRNA (h): sc-94259, ABHD1 shRNA Plasmid (h): sc-94259-SH and ABHD1 shRNA (h) Lentiviral Particles: sc-94259-V.

Molecular Weight of ABHD1: 45 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.