## SANTA CRUZ BIOTECHNOLOGY, INC.

# ABHD14B (C-15): sc-99759



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 plays a role in metabolizing smoking xenobiotics. ABHD2 participates in the development of atherosclerosis. ABHD4 is involved in an alternative synthesis pathway of NAE. Mutations in ABHD5 contribute to Chanarin-Dorfman syndrome. ABDH6 may play a role in nervous system metabolism and signaling. ABHD14B is a 210 amino acid protein that localizes to both the cytoplasm and the nucleus where it exists as two alternatively spliced isoforms.

## CHROMOSOMAL LOCATION

Genetic locus: ABHD14B (human) mapping to 3p21.2; Abhd14b (mouse) mapping to 9 F1.

#### SOURCE

ABHD14B (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ABHD14B of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-99759 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

ABHD14B (C-15) is recommended for detection of ABHD14B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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.

ABHD14B (C-15) is also recommended for detection of ABHD14B in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ABHD14B siRNA (h): sc-77948, ABHD14B siRNA (m): sc-140769, ABHD14B shRNA Plasmid (h): sc-77948-SH, ABHD14B shRNA Plasmid (m): sc-140769-SH, ABHD14B shRNA (h) Lentiviral Particles: sc-77948-V and ABHD14B shRNA (m) Lentiviral Particles: sc-140769-V.

Molecular Weight of ABHD14B: 22 kDa.

Positive Controls: human liver extract: sc-363766 or T-47D cell lysate: sc-2293.

#### **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

#### DATA



ABHD14B (C-15): sc-99759. Western blot analysis of ABHD14B expression in T-47D (A) and human liver (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.

#### PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **ABHD14B (E-12):** sc-515084, our highly recommended monoclonal alternative to ABHD14B (C-15).