

BChE (H-89): sc-99189

BACKGROUND

Present in most cells except erythrocytes, butyrylcholine esterase (BChE), also designated acylcholine acylhydrolase or pseudocholinesterase, has esterase activity as well as aryl acylamidase activity. It hydrolyzes acylcholine into choline and carboxylate. BChE is synthesized in the liver and is highly reactive with organophosphate esters. BChE can form a homotrimer composed of two dimers linked by a disulfide bond. Defects in the gene encoding BChE are associated with the disease hypocholinesterasemia. Inhibition of BChE effects the toxicity of organophosphates in the respiratory system suggesting that BChE may play a role in respiratory function. In addition, BChE may play an important pharmacological role by hydrolyzing toxic esters. This suggests an involvement of BChE in a treatment for intoxication with substances such as cocaine.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: BCHE (human) mapping to 3q26.1.

SOURCE

BChE (H-89) is a rabbit polyclonal antibody raised against amino acids 500-588 mapping near the C-terminus of BChE of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

BChE (H-89) is recommended for detection of BChE of 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).

BChE (H-89) is also recommended for detection of BChE in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for BChE siRNA (h): sc-60267, BChE shRNA Plasmid (h): sc-60267-SH and BChE shRNA (h) Lentiviral Particles: sc-60267-V.

Molecular Weight of BChE: 81 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410 or HeLa whole cell lysate: sc-2200.

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.

STORAGE

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

PROTOCOLS

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


 MONOS
 Satisfation
 Guaranteed

Try **BChE (D-5): sc-377403**, our highly recommended monoclonal alternative to BChE (H-89).