

FAAH (C-20): sc-26428

BACKGROUND

FAAH is a membrane-bound enzyme fatty acid amide hydrolase responsible for the hydrolysis of multiple primary and secondary fatty acid amides, including the neuromodulatory compounds anandamine and oleamide. The degradation of anandamide to arachidonic acid and oleamide to oleic acid terminates the signaling function of these molecules. FAAH degrades amides and esters with equivalent catalytic efficiency, enabling FAAH to function effectively as both an amidase and esterase. FAAH contributes to anandamide uptake by creating and maintaining an inward concentration gradient for anandamide. A natural single nucleotide polymorphism mutation in human FAAH in its homozygous form is strongly associated with problem drug use. This results in a missense mutation (385C→A) that converts a conserved proline residue to threonine (Pro129→Thr), producing an FAAH variant that displays normal catalytic properties but enhanced sensitivity to proteolytic degradation. Genetic mutations in FAAH constitute an important risk factor for problem drug use. The human FAAH gene maps to chromosome 1p33.

CHROMOSOMAL LOCATION

Genetic locus: FAAH (human) mapping to 1p33; Faah (mouse) mapping to 4 D1.

SOURCE

FAAH (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of FAAH of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-26428 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

FAAH (C-20) is recommended for detection of fatty acid amide hydrolase 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

FAAH (C-20) is also recommended for detection of fatty acid amide hydrolase in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for FAAH siRNA (h): sc-106807, FAAH siRNA (m): sc-145000, FAAH shRNA Plasmid (h): sc-106807-SH, FAAH shRNA Plasmid (m): sc-145000-SH, FAAH shRNA (h) Lentiviral Particles: sc-106807-V and FAAH shRNA (m) Lentiviral Particles: sc-145000-V.

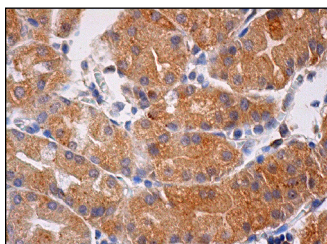
Molecular Weight of FAAH: 67 kDa.

Positive Controls: rat brain extract: sc-2392 or SK-N-MC cell lysate: sc-2237.

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



FAAH (C-20): sc-26428. Immunoperoxidase staining of formalin fixed, paraffin-embedded human stomach tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. D'Addario, C., et al. 2012. Epigenetic regulation of fatty acid amide hydrolase in Alzheimer disease. *PLoS ONE* 7: e39186.

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
Satisfaction
Guaranteed

Try **FAAH (27-Y): sc-100739**, our highly recommended monoclonal alternative to FAAH (C-20).