

FAAH (V-17): sc-26427

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 (Pro 129→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 (V-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-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-26427 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

FAAH (V-17) 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 (V-17) is also recommended for detection of fatty acid amide hydrolase in additional species, including equine and canine.

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.

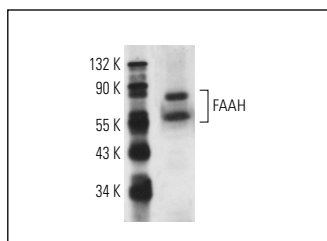
Molecular Weight of FAAH: 67 kDa.

Positive Controls: SK-N-MC cell lysate: sc-2237, rat brain extract: sc-2392 or mouse brain extract: sc-2253.

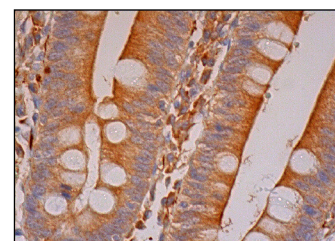
RESEARCH USE

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

DATA



FAAH (V-17): sc-26427. Western blot analysis of FAAH expression in SK-N-MC whole cell lysate.



FAAH (V-17): sc-26427. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Fonseca, B.M., et al. 2010. N-acylethanolamine levels and expression of their metabolizing enzymes during pregnancy. *Endocrinology* 151: 3965-3974.
2. Fonseca, B.M., et al. 2012. Characterisation of the endocannabinoid system in rat haemochorial placenta. *Reprod. Toxicol.* 34: 347-356.
3. Lewis, S.E., et al. 2012. Differences in the endocannabinoid system of sperm from fertile and infertile men. *PLoS ONE* 7: e47704.
4. Cappellano, G., et al. 2013. Different expression and function of the endocannabinoid system in human epicardial adipose tissue in relation to heart disease. *Can. J. Cardiol.* 29: 499-509.

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 (V-17).