#3829 Store at -20°C

FAAH1 (C84F1) Rabbit mAb

Cell Signaling TECHNOLOGY®

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com
Support ■ 877-678-TECH (8324)
info@cellsignal.com
Web ■ www.cellsignal.com

rev. 01/14/16

For Research Use Only. Not For Use In Diagnostic Procedures.

Entrez-Gene ID #2166
UniProt ID #O00519

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP, IHC-P Endogenous	M, R	60 kDa	Rabbit IgG**

Background: Endogenous cannabinoids have been implicated in addictive behaviors and drug abuse (1). Fatty-acid amide hydrolase 1 (FAAH1) is a plasma membrane-bound hydrolase that converts oleamide to oleic acid (2). This hydrolase also converts the cannabinoid anandamide, the endogenous ligand for the CB1 cannabinoid receptor, to arachidonic acid, suggesting a role in fatty-acid amide inactivation (2). Mice lacking FAAH1 have significantly higher levels of anandamide in the brain and show decreased sensitivity to pain, further indicating a role for FAAH1 in the regulation of endocannabinoid signaling *in vivo* (3). FAAH1 null mice also demonstrate an increased preference for alcohol and an increased voluntary uptake of alcohol as compared to wild-type mice, indicating a role of FAAH1 in modulating addictive behaviors (1).

Specificity/Sensitivity: FAAH1 (C84F1) Rabbit mAb detects endogenous levels of total FAAH1 protein.

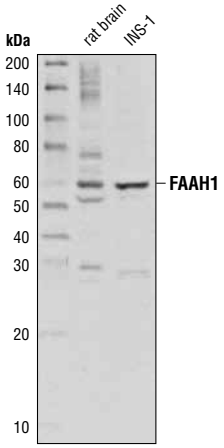
Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues from the sequence of human FAAH1 protein.

Background References:

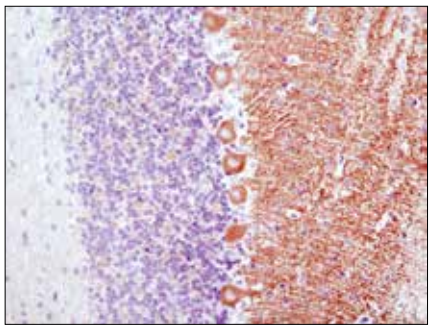
(1) Blednov, Y.A. et al. (2007) *Neuropsychopharmacology* 32, 1570-82.

(2) Cravatt, B.F. et al. (1996) *Nature* 384, 83-7.

(3) Cravatt, B.F. et al. (2001) *Proc Natl Acad Sci USA* 98, 9371-6.



Western blot analysis of extracts from rat brain and INS-1 cells using FAAH1 (C84F1) Rabbit mAb.



Immunohistochemical analysis of paraffin-embedded rat cerebellum using FAAH1 (C84F1) Rabbit mAb.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:50
Immunohistochemistry (Paraffin)	1:3200†
Unmasking buffer:	Citrate
Antibody diluent:	SignalStain® Antibody Diluent #8112
Detection reagent:	SignalStain® Boost (HRP, Rabbit) #8114

†*Optimal IHC dilutions determined using SignalStain® Boost IHC Detection Reagent.*

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

Tween®20 is a registered trademark of ICI Americas, Inc.

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.