Fatty Acid Amide Hydrolase 1, Active, Human Recombinant

CATALOG NO: P1257-25 25 µg

ALTERNATE NAMES: Anandamide amidohydrolase 1, Oleamide hydrolase 1

SEQUENCE: Full-length FAAH1 (579 amino acids) is fused with baculovirus secretion sequence at the N-terminus and 6x His-Tag at the C-terminus.

SOURCE: Sf9 cells

MOL. WEIGHT: 68.3 kDa (1-579 aa)

FORM: Lyophilized

RECONSTITUTION: Reconstitute in deionized water to a final concentration of 1 µg/µl.

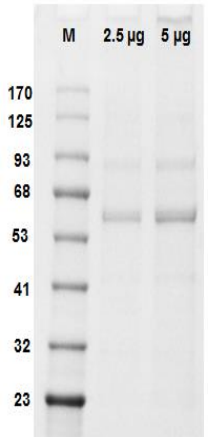
STORAGE CONDITIONS: Store the lyophilized enzyme at -20°C. The reconstituted enzyme can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C for two years. Avoid repeated freezing and thawing cycles.

DESCRIPTION: Fatty acid amide Hydrolase 1 (FAAH1) is an integral membrane enzyme that hydrolyzes endocannabinoid anandamide and related signaling lipids. Inactivation of FAAH1 produces analgesic, anti-inflammatory, anxioloytic and antidepressant responses.

SPECIFIC ACTIVITY: Specific activity is ≥ 9 mU/mg.

UNIT DEFINITION: One unit is the amount of enzyme that will hydrolyze 1.0 µmole of AMC Arachidonyl Amide at pH 9.0 and 37℃.

A



B

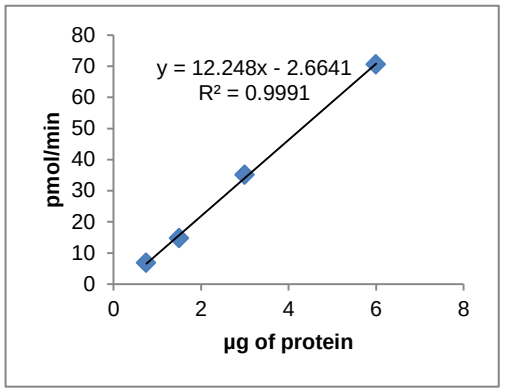


Fig A. SDS-PAGE (4-20%) recombinant FAAH1: Recombinant protein was loaded under reducing conditions and stained with Coomassie Blue. Lane M- MW marker, Lanes 2-3- FAAH1.

Fig B. Enzyme Activity Assay: The activity of the enzyme is 9 mU/mg. The enzyme's activity was assayed in 50 mM Tris pH 9, 1 mM EDTA at 37°C for 30 minutes. AMC fluorescence was measured at Ex/Em 360/465 nm.

RELATED PRODUCTS:

- FAAH Inhibitor (Cat. No. 1928)
- FAAH1 Inhibitor Screening Kit (Fluorometric) (Cat. No. K379)
- Fatty Acid Amide Hydrolase Activity Assay Kit (Fluorometric) (Cat. No. K434)
- FAAH Inhibitor, PF-622 (Cat. No.1928)

FOR RESEARCH USE ONLY! Not to be used on humans.