Proteins



Product Data Sheet

FAAH2 Protein, Human (Cell-Free, His)

Cat. No.: HY-P702276

Fatty-acid amide hydrolase 2; Amidase domain-containing protein; Anandamide Synonyms:

amidohydrolase 2; Oleamide hydrolase 2

Species: Human

E. coli Cell-free Source: Accession: Q6GMR7 (M1-F532)

Gene ID: 158584 Molecular Weight: 59.8 kDa

PROPERTIES

AA Sequence	MAPSFTARIQ	LFLLRALGFL	IGLVGRAALV	LGGPKFASKT
	PRPVTEPLLL	LSGMQLAKLI	RQRKVKCIDV	VQAYINRIKD
	VNPMINGIVK	YRFEEAMKEA	HAVDQKLAEK	QEDEATLENK
	WPFLGVPLTV	KEAFQLQGMP	NSSGLMNRRD	AIAKTDATVV
	ALLKGAGAIP	LGITNCSELC	MWYESSNKIY	GRSNNPYDLQ
	HIVGGSSGGE	GCTLAAACSV	IGVGSDIGGS	IRMPAFFNGI
	FGHKPSPGVV	PNKGQFPLAV	GAQELFLCTG	PMCRYAEDLA
	PMLKVMAGPG	IKRLKLDTKV	HLKDLKFYWM	EHDGGSFLMS
	KVDQDLIMTQ	KKVVVHLETI	LGASVQHVKL	KKMKYSFQLW
	IAMMSAKGHD	GKEPVKFVDL	LGDHGKHVSP	LWELIKWCLG
	LSVYTIPSIG	LALLEEKLRY	SNEKYQKFKA	VEESLRKELV
	DMLGDDGVFL	YPSHPTVAPK	HHVPLTRPFN	FAYTGVFSAL
	GLPVTQCPLG	LNAKGLPLGI	QVVAGPFNDH	LTLAVAQYLE
	KTFGGWVCPG	KF		

Appearance

Lyophilized powder.

Formulation Lyophilized from a 0.22 µm filtered solution of Tris/PBS-based buffer, 6% Trehalose, pH 8.0.

Endotoxin Level

<1 EU/ μ g, determined by LAL method.

Reconsititution

It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH₂O. For long term storage it is recommended to add 5-50% of glycerol (final concentration). Our default final concentration of glycerol is 50%. Customers could use it as reference.

Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

Fatty Acid Amide Hydrolase 2 (FAAH2) is an enzyme that catalyzes the hydrolysis of endogenous amidated lipids, including the sleep-inducing lipid oleamide ((9Z)-octadecenamide) and the endocannabinoid anandamide (N-(5Z,8Z,11Z,14Z-eicosatetraenoyl)-ethanolamine). FAAH2 plays a crucial role in regulating the signaling functions of these bioactive molecules by converting them into their corresponding fatty acids. The enzyme exhibits a preference for monounsaturated substrates like anandamide over polyunsaturated ones. This hydrolytic activity on amidated lipids suggests FAAH2's involvement in the control and modulation of various physiological processes, including those related to sleep regulation and endocannabinoid signaling. It has to succinctly describe FAAH2's substrate specificity and its role in regulating the signaling functions of endogenous amidated lipids.

Caution: Product has not been fully validated for medical applications. For research use only.

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