Human/Mouse/Rat Kynurenine 3-Monooxygenase/KMO Alexa Fluor® 405-conjugated Antibody

Monoclonal Rabbit IgG Clone # 2493A
Catalog Number: FAB8050V
100 µg

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human Kynurenine 3-Monooxygenase/KMO in direct ELISAs. Detects human, mouse, and rat Kynurenine 3-Monooxygenase/KMO in Western blot.
Source	Monoclonal Rabbit IgG Clone # 2493A
Purification	Protein A or G purified from cell culture supernatant
Immunogen	*S. frugiperda* insect ovarian cell line *Sf 21*-derived recombinant human Kynurenine 3-Monooxygenase/KMO Asp2-Leu441 Accession # O15229
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Kynurenine 3-Monooxygenase (KMO), also known as Kynurenine 3-Hydroxylase, is a part of the kynurenine pathway of tryptophan degradation (1). KMO catalyzes the NADPH- and flavin adenine dinucleotide (FAD)-dependent 3-hydroxylation of kynurenine to 3-hydroxykynurenine (3-HK). 3-HK is neurotoxic via the generation of hydrogen peroxide (2) and through the excitotoxic effects of its downstream metabolite quinolinic acid (3). The levels of 3-HK and quinolinic acid are increased in the brain with Alzheimer's disease and Huntington's disease (1). Inhibition of KMO was shown to reverse cognitive and motor deficits in mouse models of those diseases via an increase in neuroprotective kynurenic acid (4). KMO is found in the mitochondrial outer membrane of microglial cells in the brain and dendritic cells and macrophages in the periphery (1).

PRODUCT SPECIFIC NOTICES

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