

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Kynureninase in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human Kynureninase Met1-Asn465 Accession # Q16719
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 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.
Immunoprecipitation	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

Kynureninase is a pyridoxal-5 (-phosphate-dependent enzyme that catalyzes the hydrolytic cleavage of the amino acids L-kynurenine and L-3-hydroxykynurenine to give either anthranilic acid or 3-hydroxyanthranilic acid and alanine (1). The enzyme is a member of the "kynurenine pathway" enzymes, through which the majority of dietary tryptophan is degraded in the liver, and is involved in the *de novo* biosynthesis of NAD⁺ (2, 3). Kynurenine pathway genes are expressed in immune system cells such as macrophages and microglia. During inflammatory responses, the kynurenine pathway in these cells produces quinolinic acid (QA) and not NAD⁺. QA excites neurons via the activation of NMDA (N-methyl-D-aspartate) receptors resulting in neuronal damage. The tissue-damaging process has been demonstrated in AIDS-related dementia complex, Alzheimer's, stroke, epilepsy, and Huntington's disease. Because Kynureninase is one of the key enzymes of QA production, its inhibitors may be useful for the treatment of neurological disorders. The recombinant Kynureninase has been shown to possess specificity for 3-hydroxykynurenine over kynurenine (4, 5).

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