

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse GSAP in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant mouse GSAP Arg737-Leu858 Accession # Q3TCV3
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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.
Immunocytochemistry	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

GSAP (GSAP/gamma-Secretase Activating Protein; also known as Pion) is a member of the GSAP family of proteins. It is expressed in neurons, and purportedly serves as a regulator for g-secretase processing of APP. Initially, it was thought that cytosolic g-secretase mediated the second cleavage step in APP processing. In the presence of GSAP, APP (now C99 after b-secretase cleavage) was preferentially cleaved between either Val40-Ile41, or Ala42-Thr43, generating Ab40 and Ab42, respectively. In the absence of GSAP, APP would be preferentially cleaved between L49-Val50. Notably, the presence of GSAP was shown to have no effect on g-secretase processing of Notch. Subsequent studies have introduced uncertainty into these relationships. While an absence of GSAP does apparently reduce Ab production, its presence may not have the regulatory effect once proposed. Mouse GSAP-16K (15-17 kDa) is 121 amino acids (aa) in length (aa 738-858) (SwissProt #Q3TCV3), it presumably represents a proteolytic cleavage product of the large 95-100 kDa, 858 aa GSAP-FL termed also Pion/pigeon homolog protein. There are no readily identifiable structural motifs associated with the molecule. Mouse PION has two isoform variants associated with the gene. One possesses a Phe substitution for aa 172-858, while another possesses a six aa substitution for aa 527-858. Over aa 737-858, mouse GSAP shares 94% and 88% aa sequence identity with rat and human GSAP, respectively.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.