Human GASP-1/WFIKKN2 Alexa Fluor® 750-conjugated Antibody

Monoclonal Mouse IgG_{2A} Clone # 288513

Catalog Number: FAB2070S

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human GASP-1/WFIKKN2 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) GASP-2 is observed.
Source	Monoclonal Mouse IgG_{2A} Clone # 288513
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human GASP-1/WFIKKN2 Leu35-His576 Accession # Q8TEU8
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 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.*

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

Growth and differentiation factor-associated serum protein-1 (GASP-1) was isolated in a screen to identify proteins in mice that copurify with myostatin (GDF-8), a potent negative regulator of skeletal muscle mass (1). The GASP-1 cDNA encodes a 571 amino acid (aa) protein that contains a 29 aa signal sequence and is comprised of many conserved domains: WAP, follistatin/Kazal, immunoglobulin, two tandem Kunitz, and netrin (1). Two related human proteins which contain the same domain structure are called WFIKKN (based on the presence and order of these conserved domains) and WFIKKNRP (WFIKKN-related protein) (2). Mouse GASP-1 is homologous to human WFIKKNRP and mouse GASP-2 to human WFIKKN. Human GASP-1 is the same protein as WFIKKNRP. WAP, follistatin, Kazal and netrin domains are all implicated in protease inhibition, and these proteins may be multivalent protease inhibitors (3). GASP-1 and -2 show distinct expression patterns both in the developing fetus and the adult. In the developing fetus, GASP-1 expression is highest in the brain, skeletal muscle, thymus and kidney while GASP-2 is abundant in the lung, skeletal muscle and liver (4). In the adult, GASP-1 is primarily expressed in the ovary, testis, and brain while GASP-2 is in the pancreas, liver, and thymus (4). GASP-1 inhibits myostatin and the highly related protein, GDF-11, but not Activin or TGF-β *in vitro* (1). In addition, GASP-1 binds directly but independently to both mature myostatin and the myostatin propeptide (1). By aa sequence, human GASP-1 is 90% and 55% identical to mouse GASP-1 and human GASP-2, respectively.

PRODUCT SPECIFIC NOTICES

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