

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human GILT/IFI30 in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Human embryonic kidney cell line HEK293-derived recombinant human GILT/IFI30 Ser27-Lys250 Accession # P13284
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

IFI30 (Gamma-interferon-inducible protein IP-30; also gamma-interferon [IFN-γ] inducible lysosomal thiol reductase/GILT and Legumaturain) is a 25-30 kDa member of the GILT family of proteins. It is constitutively expressed in B cells and dendritic cells, and induced by IFN-γ in non-APCs. IFI30 is both intracellular and secreted as an inactive glycosylated proenzyme. The glycosylation pattern contains a terminal phosphorylated mannose, which is recognized by cell surface mannose-6-phosphate receptors and internalized into lysosomes. In lysosomes, IFI30 is processed into an active, mature form, and via a thiol reductase domain, breaks disulfide bonds in molecules destined for lysosomal degradation. This is a critical first step in the processing and subsequent presentation of peptides that will initiate an antigenic response. The human IFI30 proenzyme is 224 amino acids (aa) in length. In this form, it is 33-35 kDa in size. Following proteolytic processing at both the N- and C-terminus, a 175 aa, 25-30 kDa active mature form is generated (aa 58-232). The mature region possesses a thiol reductase domain (aa 62-151) plus one utilized Thr phosphorylation site. Both the pro- and mature forms exhibit enzymatic activity. IFI30 is known to exist as a 50-60 kDa disulfide-linked homodimer. There are four potential isoform variants. One contains a 26 aa substitution for aa 213-250, a second shows a deletion of aa 131-161, a third shows a deletion of aa 106-123, while a fourth shows a deletion of aa 64-212. Over aa 27-250, human IFI30 shares 62% aa sequence identity with mouse IFI30.

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.