

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human GIF in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Human embryonic kidney cell line HEK293-derived recombinant human GIF Ser19-Tyr417 Accession # P27352
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.

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

GIF (Gastric Intrinsic Factor; also better known as IF or Intrinsic Factor) is a 45-55 kDa, secreted glycoprotein member of the eukaryotic cobalamin transport family of proteins. It should not be confused with either GIF/growth inhibitory factor/metallothionein 3, or GIF/glycosylation-inhibiting factor/macrophage migration inhibitory factor/phenylpyruvate tautomerase. GIF shows restricted expression, being essentially limited to parietal and select chief cells of the stomach. GIF binds to haptocorrin-associated cobalamin/VitB12 in the duodenum, whereupon it passes into the ileum and is taken up by a 500 kDa epithelial receptor named cubam, a complex of cubilin and amnionless molecules. Mature human GIF is 399 amino acids (aa) in length (aa 19-417) that contains one principal B12 binding site between aa 365-395. There is one isoform variant that shows a deletion of aa 3-27. Full-length human GIF shares 82% aa sequence identity with mouse GIF.

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