Animal-Free Intrinsic Factor/GIF Protein, Human (His)

Cat. No.:	HY-P700085AF
Synonyms:	Gastric intrinsic factor; GIF; IF; Intrinsic factor; IFMH; INF; TCN3
Species:	Human
Source:	E. coli
Accession:	P27352 (M1-Y417)
Gene ID:	2694
Molecular Weight:	Approximately 46.23 kDa

PROPERTIES

AA Sequence	M A W F A L Y L L S L L W A T A G T S T Q T Q S S C S V P S A Q E P L V N G I Q V L M E N S V T S S A Y P N P S I L I A M N L A G A Y N L K A Q K L L T Y Q L M S S D N N D L T I G Q L G L T I M A L T S S C R D P G D K V
Appearance	Lyophilized powder.
Formulation	Lyophilized from a solution containing 1X PBS, pH 8.0.
Endotoxin Level	<0.1 EU per 1 μg of the protein by the LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	Intrinsic Factor (GIF) stands as a key facilitator in the absorption of the essential vitamin cobalamin (Cbl) in the ileum. Its pivotal role unfolds through a well-orchestrated process, where the CBLIF-cobalamin complex, upon interaction with the Cubilin (CUBN) receptor, undergoes internalization via receptor-mediated endocytosis. This intricate interplay underscores the significance of GIF in ensuring the effective absorption of cobalamin, a crucial vitamin for various physiological processes. GIF's interaction with CUBN, particularly involving CUB domains, highlights the molecular intricacies governing this essential aspect of vitamin uptake.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA