

LD Biopharma, Inc. 9924 Mesa Rim Road, Suite B San Diego, CA 92121 Tel: 858-876-8266 http://www.ldbiopharma.com

- PRODUCT DATA SHEET -

Name of Product:Recombinant Human IRF2 ProteinCatalog Number:hTF-1611Manufacturer:LD Biopharma, Inc.

Introduction

Human interferon regulatory factor 2 (IRF2) gene encodes interferon regulatory factor 2, a member of the interferon regulatory transcription factor (IRF) family. IRF2 competitively inhibits the IRF1-mediated transcriptional activation of interferon a and b, and presumably other genes that employ IRF1 for transcription activation. However, IRF2 also functions as a transcriptional activator of histone H4.

Full-length human IRF2 (346 aa) gene was constructed with 29 aa N-terminal T7 / His / TEV cleavage site Tag and expressed in E.coli as inclusion bodies. It was refolded using our unique "temperature shift inclusion body refolding" technology and chromatographically purified.

Gene Symbol:	IRF2
Accession Number:	NP_002190.2
Species:	Human
Size:	50 µg / Vial
Composition:	0.50 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, Sucrose and DTT.
Storage:	In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 7 days.

Key References

Cai YJ, et al., *Up-regulation of intestinal epithelial cell derived IL-7 expression by keratinocyte growth factor through STAT1/IRF-1, IRF-2 pathway.* PLoS ONE 8 (3), E58647 (2013)



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Klune JR, et al., *Interferon regulatory factor-2 is protective against hepatic ischemiareperfusion injury*. Am. J. Physiol. Gastrointest. Liver Physiol. 303 (5), G666-G673 (2012)

Cui L, et al., *IRF-2 is over-expressed in pancreatic cancer and promotes the growth of pancreatic cancer cells*. Tumour Biol. 33 (1), 247-255 (2012)

Applications

- 1. May be used for in vitro IRF2 mediated gene transcription regulation study for interferon a and b production with "ProFectin" reagent based intracellular delivery of this protein.
- 2. May be used as specific protein substrate for kinase and ubiquitin (Sumo pathway) related enzyme functional screening assays.
- 3. May be used for IRF2 protein-protein interaction mapping.
- 4. Potential biomarker protein for monitoring liver damage or cancer progress.
- 5. As immunogen for specific antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHHENLYFQGGGSPVERMRMRPWLEEQINSNTIPGLKWLNKEKKIFQI PWMHAARHGWDVEKDAPLFRNWAIHTGKHQPGVDKPDPKTWKANFRCAMNSLPDIEEVKDKSIK KGNNAFRVYRMLPLSERPSKKGKKPKTEKEDKVKHIKQEPVESSLGLSNGVSDLSPEYAVLTST IKNEVDSTVNIIVVGQSHLDSNIENQEIVTNPPDICQVVEVTTESDEQPVSMSELYPLQISPVS SYAESETTDSVPSDEESAEGRPHWRKRNIEGKQYLSNMGTRGSYLLPGMASFVTSNKPDLQVTI KEESNPVPYNSSWPPFQDLPLSSSMTPASSSSRPDRETRASVIKKTSDITQARVKSC