



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 GATA2-11R Protein
Catalog Number: hTF-0069
Manufacturer: LD Biopharma, Inc.

Introduction

Human GATA2 gene encodes a member of the GATA family of zinc-finger transcription factors that are named for the consensus nucleotide sequence they bind in the promoter regions of target genes. The encoded protein plays an essential role in regulating transcription of genes involved in the development and proliferation of hematopoietic and endocrine cell lineages. Alternative splicing results in multiple transcript variants.

Recombinant human GATA2 protein was constructed with C-terminal tag of 11 arginine domain, which efficiently delivery protein intracellularly. This protein was expressed in *E. coli* as inclusion bodies, refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified. Incubating this protein in culture mediums at concentration of 2-8 µg/ml may be used for studying of human HSC or endothelial cell differentiation.

Gene Symbol:	GATA2 (Isoform 1)
Accession Number:	NP_116027.2
Species:	Human
Size:	50 µg / Vial
Composition:	1.0 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, arginine, DTT and Glycerol.
Storage:	In Liquid. Keep at -20°C for long term storage. Product is stable at 4 °C for at least 7 days.

Key References

Fujiwara, T., et al. *Discovering hematopoietic mechanisms through genome-wide analysis of GATA factor chromatin occupancy.* Mol. Cell 36 (4), 667-681 (2009)

Hongyan Zhou, et al. *Generation of induced pluripotent stem cells using recombinant protein.* Cell Stem Cell. Vol 4. Issue 5: 381-384 (2009)



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

Applications

1. Protein transduction for cell differentiation.
2. Active recombinant protein, may be used for ELISA based DNA/Protein binding assay.
3. As specific protein substrate for kinase assay.
4. Immunogen for specific antibody production.

Quality Control

1. Purity: > 90% by SDS-PAGE.
2. DNA binding assay: Not tested yet.

Recombinant Protein Sequence

29aa_Tag_EVAP EQPRWMAHPAVLNAQHPD SHHPGLAHNYMEPAQLLPD EVDVFFNHLDSQG
NPYYANPAHARARVSYSPA HARLTGGQMCRPHLLHSPGLPWLDGGKAALSAAAHHHNPWTVSP
FSKTPLHPSAAGGPGGPLSVYPGAGGGSGGGSGSSVASLTPTAAHSGSHLFGFPPTPPKEVSPD
PSTTGAASPASSSAGGSAARGEDKDG VKYQVSLTESMKMESGSPLRPGLATMGTQPATHHP IPT
YPSYVPAAAHDYSSGLFHPGGFLGGPASSFTPKQ RSKARSCSEGREC VNCGATATPLWRRDGTG
HYLCNACGLYHKMNGQNRPLIKPKRRLSAARRAGTCCANCQTTTTTLWRRNANGDPVCNACGLY
YKLHNVNRPLTMKKEGIQTRNRKMSNKS KSKKGAE CFEELSKCMQEKSSPFSAAALAGHMAPV
GHLPPFSHSGHILPTPTPIHPSSSLSF GHPPHPSMVTAMG **LEESGGGGSPGRRRRRRRRRRR**