



LD Biopharma, Inc.
9924 Mesa Rim Road Suite B
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- PRODUCT DATA SHEET -

Name of Product: Recombinant Human HAGH Protein
Catalog Number: hRP-0713
Manufacturer: LD Biopharma, Inc.

Introduction

Located in mitochondrion, and high level expression in both liver and kidney, human HAGH gene encodes the enzymatic protein which classified as a thiolesterase and is responsible for the hydrolysis of S-lactoyl-glutathione to reduced glutathione and D-lactate. Regulation of HAGH activities has been applied in sensitizing cancer cell to various chemotherapy drugs.

Full-length human HAGH (14-308 aa) was constructed with 15 N-terminal T7 tag. This protein was expressed in *E. coli* as inclusion bodies, refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

Gene Symbol: HAGH (GLO2; GLX2; GLXII; HAGH1)
Accession Number: NP_005317
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, Sucrose and DTT.
Storage: In Liquid. Keep at -20°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Antognelli, C., et al., *Alteration of glyoxalase genes expression in response to testosterone in LNCaP and PC3 human prostate cancer cells*. Cancer Biol. Ther. 6 (12), 1880-1888 (2007)

Xu, Y. et al., *Glyoxalase II, a detoxifying enzyme of glycolysis byproduct methylglyoxal and a target of p63 and p73, is a pro-survival factor of the p53 family*. J. Biol. Chem. 281 (36),



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Applications

1. May be used for in vitro cellular detoxifying enzyme activity assay development study.
2. May be used for in vitro protein – protein interaction measurement for mapping HAGH binder.
3. May be used as antigen for specific antibody production.

Quality Control

1. Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGEFAALGAACARRGLGPALLGVFCHTDLRKNLTVDEGTMKVEVLPALTDNYM
YLVIDDETKEAAIVDPVQPQKVVDAAARKHGVKLT'TVLT'THHHWDHAGGNEKLVKLESGLKVYGG
DDRIGALTHKITHLSTLQVGS LNKCLATPCHTSGHICYFVSKPGGSEPPAVFTGDTLFFVAGCG
KFYEGETADEMCKALLEVLGRLPPDTRVYCGHEY TINNLKFARHVEPGNAAIREKLAWAKEKYSI
GEPTVPSTLAE EFTYNPFMRVREKTVQQHAGETDPVTTMRAVRREKDQFKMPRD