

AR09147PU-N**Recombinant human GRP94 / TRA1 (aa 22-803), His-tagged****Alternate names:**

94 kDa glucose-regulated protein, GRP94, Heat shock protein 90 kDa beta member 1, Tumor rejection antigen 1

Quantity:

0.1 mg

Concentration:

1.0 mg/ml (determined by Bradford assay)

Background:

GRP94, also known as Heat shock protein 90kDa beta, member 1 (HSP90B1), is an abundant resident endoplasmic reticulum (ER) luminal stress protein which together with cytosolic Hsp90 belongs to the Hsp90 family of molecular chaperones. It plays an important role in maintaining protein homeostasis in the secretory pathway. Also, GRP94 can function in the intracellular trafficking of peptides from the extracellular space to the MHC class I antigen processing pathway of antigen presentation cells.

Uniprot ID:[P14625](#)**NCBI:**[NP_003290](#)**GeneID:**[7184](#)**Species:**

Human

Source:

E. coli

Format:**State:** Liquid purified protein**Purity:** >90% by SDS - PAGE**Buffer System:** 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT, 1 mM EDTA, 0.1 M NaCl, 10% glycerol**Description:**

Recombinant human GRP94 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography.

AA Sequence:

MRGSHHHHHH GMASMTGGOO MGRDLYDDDD KDRWGSMDDE VDVDGTVEED LGKSREGSRT
DDEVVQREEE AIQLDGLNAS QIRELREKSE KFAFQAEVNR MMKLIINSLY KNKEIFLREL
ISNASDALDK IRLISLTDEN ALSGNEELTV KIKCDKEKNL LHVTDTGVGM TREELVKNLG
TIAKSGTSEF LNKMTAQED QOSTSELIGQ FGVGFYSAFL VADKIVVTSK HNNDTQHIWE
SDSNEFSVIA DPRGNTLGRG TTITLVLKEE ASDYLELDTI KNLVKKYSQF INFPIYVWSS
KTETVEEPM EEEAAKEEKE ESDDEAAVEE EEEEEKPKTK KVEKTVDWE LMNDIKPIWQ
RPSKEVEEDE YKAFYKFSK ESDDPMAYIH FTAEGEVTFK SILFVPTSAP RGLFDEYGSK
KSDYIKLYVR RVFITDDFHD MMPKYLNFVK GVVSDDDLPL NVSRETLQQH KLLKVIRKKL
VRKTLDMIKK IADKYNDTF WKEFGTNIKL GVIEDHSNRT RLAKLLRFQS SHHPTDITSL
DQYVERMKEK QDKIYFMAGS SRKEAESSPF VERLLKKGYE VIYLTEPVDE YCIQALPEFD
GKRFQNVAKE GVKFDESEKT KESREAVEKE FEPLLNWMKD KALKDKIEKA VVSQRLTESP
CALVASQYGW SGNMERIMKA QAYQTGKDIS TNYASQKKT FEINPRHPLI RDMLRRIKED
EDDKTVLDDLA VVLFETATLR SGYLLPDTKA YGDRIERMLR LSLNIDPDAK VEEPEEEPEE
ETAEDTTEDT EQDEDEEMDV GTDEEEETAK ESTAEKDEL

Molecular weight: 94.4 kDa (819 aa)**Storage:**

Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

Randow F., et al. (2001). Nat Cell Biol. 3(10):E231.
Li Z., et al. (2002). Front Biosci. 7:d731-51.

Pictures:

Recombinant human HSP90B1 (GRP94),
aa 22-803, His-tagged: 15% SDS-PAGE (3
µg)

