

Recombinant human WARS protein

Catalog Number: ATGP0627

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-471aa

UniProt No.

P23381

NCBI Accession No.

NP_776049

Alternative Names

Tryptophanyl-tRNA synthetase cytoplasmic, GAMMA-2, IFI53, IFP53, Tryptophanyl-tRNA synthetase, cytoplasmic, TrpRS, hWRS

PRODUCT SPECIFICATION

Molecular Weight

55.3 kDa (491aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.1M NaCl, 1mM DTT, 10% glycerol

Purity

> 90% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

WARS, also known as tryptophanyl-tRNA synthetase, belongs to the class I tRNA synthetase family. Two forms of tryptophanyl tRNA synthetase exist, a cytoplasmic form, named WARS, and a mitochondrial form, named WARS2. WARS catalyzes the aminoacylation of tRNA (trp) with tryptophan and is induced by interferon. It also regulates ERK, Akt, and eNOS activation pathways that are associated with angiogenesis, cytoskeletal reorganization and shear stress-responsive gene expression. Recombinant human WARS protein, fused to His-

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tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

Amino acid Sequence

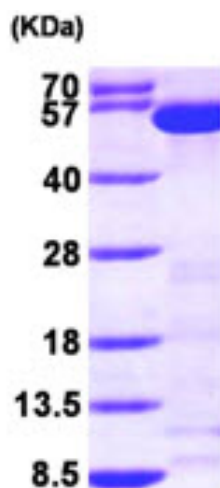
MGSSHHHHHH SGLVPRGSH MPNSEPASLL ELFNSIATQG ELVRSKAGN ASKDEIDSAV KMLVSLKMSY KAAAGEDYKA
DCPPGNPAPT SNHGPDTEA EEDFVDPWTV QTSSAKGIDY DKLIVRFGSS KIDKELINRI ERATGQRPHH FLRRGIFFSH
RDMNQVLDAY ENKKPFYLYT GRGPSSEAMH VGHLPIFIFT KWLQDVFNVP LVIQMTDDEK YLWKDLTLDQ AYSYAVENAK
DIIACGFDIN KTFIFSDLDY MGMSSGFYKN VVKIQKHVTF NQVKGIFGFT DSDCIGKISF PAIQAAPSFS NSFPQIFRDR
TDIQCLIPCA IDQDPYFRMT RDVAPRIGYP KPALLHSTFF PALQGAQTKM SASDPNSSIF LTDTAKQIKT KVNKHAFSGG
RDTIEHRQF GGNCVDVVSF MYLTFLEDD DKLEQIRKDY TSGAMLTGEL KKALIEVLQP LIAEQARRK EVTDEIVKEF
MTPRKLSFDF Q

General References

Nagano K., et al. (2004) *Oncogene*. 23(9):1693-703.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)