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-

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

Amino acid Sequence

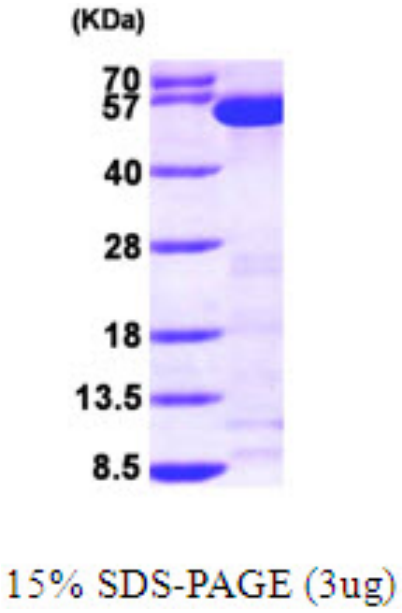
MGSSHHHHHH SSGLVPRGSH MPNSEPASLL ELFNSIATQG ELVRSLKAGN ASKDEIDSAV KMLVSLKMSY KAAAGEDYKA DCPPGNPAPT SNHGPDATEA EEDFVDPWTV QTSSAKGIDY DKLIVRFGSS KIDKELINRI ERATGQRPHH FLRRGIFFSH RDMNQVLDAY ENKKPFYLYT GRGPSSEAMH VGHLIPFIFT KWLQDVFNVP LVIQMTDDEK YLWKDLTLDQ AYSYAVENAK DIIACGFDIN KTFIFSDLDY MGMSSGFYKN VVKIQKHVTF NQVKGIFGFT DSDCIGKISF PAIQAAPSFS NSFPQIFRDR TDIQCLIPCA IDQDPYFRMT RDVAPRIGYP KPALLHSTFF PALQGAQTKM SASDPNSSIF LTDTAKQIKT KVNKHAFSGG RDTIEEHRQF GGNCDVDVSF MYLTFFLEDD DKLEQIRKDY TSGAMLTGEL KKALIEVLQP LIAEHQARRK EVTDEIVKEF MTPRKLSFDF Q

General References

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

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

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