

WARS, 1-471aa, Human, His tag, E.coli

Cat.NO.: TP04493

3th Edition

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

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.

Form:Liquid. In 20 mM Tris-HCl buffer (pH8.0) containing 0.1M NaCl, 1mM DTT, 10% glycerol

Molecular Weight:55.3 kDa (491aa), confirmed by MALDI-TOF

Sequences:

MGSSHHHHHSSGLVPRGSHMPNSEPASLLELFNSIATQGELVRSCLKAGNASKDEIDSAVKMLVSLKMSYKAAAG
EDYKADCPPGNPAPTSNHGPDATEAEEDFVDPWTVQTSSAKGIDYDKLIVRFGSSKIDKELINRIERATGQRPHHFL
RRGIFFSHRDMNQVLDAZENKKPFYLYTGRGPSSEAMHVGHLIPFIFTKWLQDVFNVPLVIQMTDDEKYLWLDLTL
DQAYSYAVENAKDIIACGFDINKTFIFSDLDYMGMSGFYKNVVKIQKHVTFNQVKGIFGFTDSDCIGKISFPAIQAAP
SFSNSFPQIFRDRTDIQCLIPCAIDQDPYFRMTRDVAPRIGYPKALLHSTFFPALQGAQTKMSASDPNSSIFLTDTA
KQIKTKVKNKHAFFSGGRDTIEEHRQFGGNCVDVVSFMYLTFLEDDDKLEQIRKDYTSGAMLTGELKKALIEVLQPLIA
EHQARRKEVTDEIVKEFMTPRKLSFDFQ

Purity:> 95% by HPLC

Concentration:1 mg/ml (determined by Bradford assay)

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.