

WARS Protein, Human (His)

Cat. No.:	HY-P71134
Synonyms:	WARS also known as Tryptophanyl-tRNA synthetase; Interferon-induced protein 53.
Species:	Human
Source:	E. coli
Accession:	P23381 (M1-Q471)
Gene ID:	7453
Molecular Weight:	Approximately 60.0 kDa

PROPERTIES

AA Sequence	<pre> M P N S E P A S L L E L F N S I A T Q G E L V R S L K A G N A S K D E I D S A V K M L V S L K M S Y K A A A G E D Y K A D C P P G N P A P T S N H G P D A T E A E E D F V D P W T V Q T S S A K G I D Y D K L I V R F G S S K I D K E L I N R I E R A T G Q R P H H F L R R G I F F S H R D M N Q V L D A Y E N K K P F Y L Y T G R G P S S E A M H V G H L I P F I F T K W L Q D V F N V P L V I Q M T D D E K Y L W K D L T L D Q A Y S Y A V E N A K D I I A C G F D I N K T F I F S D L D Y M G M S S G F Y K N V V K I Q K H V T F N Q V K G I F G F T D S D C I G K I S F P A I Q A A P S F S N S F P Q I F R D R T D I Q C L I P C A I D Q D P Y F R M T R D V A P R I G Y P K P A L L H S T F F P A L Q G A Q T K M S A S D P N S S I F L T D T A K Q I K T K V N K H A F S G G R D T I E E H R Q F G G N C D V D V S F M Y L T F F L E D D D K L E Q I R K D Y T S G A M L T G E L K K A L I E V L Q P L I A E H Q A R R K E V T D E I V K E F M T P R K L S F D F Q </pre>
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20 mM PB, 8% Trehalose, 4% Mannitol, 50 mM NaCl, 0.05% Tween 80, pH 7.5.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

WARS, encompassing Isoform 1, Isoform 2, T1-TrpRS, and T2-TrpRS, displays aminoacylation activity, with T2-TrpRS being the exception as it lacks this enzymatic function. In terms of angiostatic activity, Isoform 2, T1-TrpRS, and T2-TrpRS exhibit this property, while Isoform 1 does not possess angiostatic capabilities. Particularly, T2-TrpRS stands out by inhibiting fluid shear stress-activated responses in endothelial cells. WARS plays a pivotal role in regulating key signaling pathways, including ERK, Akt, and eNOS activation, which are associated with angiogenesis, cytoskeletal reorganization, and the expression of genes responsive to shear stress. This multifaceted functionality underscores WARS's involvement in intricate cellular processes and its potential impact on vascular responses.

Caution: Product has not been fully validated for medical applications. For research use only.

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