
HSP47(Colligin), 18-418aa, Human, His-Tagged, Recombinant, E.coli

Cat.NO.: TP02522

3th Edition

Synonyms:Collagen-binding protein, Serpin H1, SERPINH1, RA-A47, AsTP3

Description:Heat shock protein 47(HSP47), also known as Colligin or Serpin H1, is a serpin which serves as a human chaperone protein for collagen. This protein is a member of the serpin superfamily of serine proteinase inhibitors. Its expression is induced by heat shock. The protein acts as a molecular chaperone facilitating the folding and assembly of procollagen molecules, retaining unfolded molecules within the ER, and assisting the transport of correctly folded-molecules from the ER to Golgi apparatus.

Form:Liquid. In 20 mM Tris-HCl buffer (pH 8.0) containing 20% glycerol.

Molecular Weight:48.9 kDa (439 aa), confirmed by MALDI-TOF

Sequences:

MGSSHHHHHSSGLVPRGSHMAAEVKKPAAAAAPGTAEKLSPKAATLAERSAGLAFSLYQAMAKDQAVENILVSP
VVVASSLGLVSLGGKATTASQAKAVLSAEQLRDEEVHAGLGELLRSLNSTARNVTWKLGSRLYGPSSVSFADDFV
RSSKQHYNCEHSKINFRDKRSALQSINEWAAQTTDGKLPEVTKDVERTDGALLVNAMFFKPHWDEKFHHKMVDNR
GFMVTRSYTVGVMMMHRTGLYNYDDDEKEKLQIVEMPLAHKLSSLIILMPHHVEPLERLEKLLTKEQLKIWMGKMQ
KKAVAIISLPKGVVEVTHDLQKHLAGLGLTEAIDKNKADLSRMSGKKDLYLASVFHATAFELDTDGNPFDQDIYGREE
LRSPKLFYADHPFIFLVRDTQSGSLLFIGRLVLRPKGDKMRDEL

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.