9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
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SERPINH1 Human

Heat Shock 47kDa Human Recombinant
RCP2060

Product Overview

Name	SERPINH1 Human

Description

Heat Shock 47kDa Human Recombinant

Accession (Primary)	P50454

Synonyms

HSP47, HSP-47, Colligin-1, CBP1, Collagen Binding Protein-1, Serpin Peptidase Inhibitor Clade-H memebr 1, Serpin H1, Collagen-binding protein, Colligin, 47 kDa heat shock protein, Rheumatoid arthritis-related antigen RA-A47, Arsenic-transactivated protein 3, AsTP3, Cell proliferation-inducing gene 14 protein, SERPINH1, CBP2, gp46, PIG14, PPROM, RA-A47, SERPINH2.

Introduction

SERPINH1 is part of the serpin superfamily of serine proteinase inhibitors. SEPINH1 expression is induced by heat shock. HSP47 localizes to the endoplasmic reticulum lumen and binds collagen therefore it is a molecular chaperone which takes part in the maturation of collagen molecules, 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. Autoantibodies to HSP47 protein have been found in rheumatoid arthritis. SERPINH1 binds specifically to collagen and acts as a chaperone in the biosynthetic pathway of collagen.

Source

Escherichia Coli.

Physical Appearance

Sterile filtered colorless solution.

Formulation

The SERPINH1 protein solution (1mg/ml) contains 20mM Tris-HCl buffer (pH 8.0) and 20% glycerol.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Purity

Greater than 90.0% as determined by SDS-PAGE.

Amino acid sequence

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MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWGSHM AA EVKKPAAAAA PGTAEKLSPK AATLAERSAG LAFSLYQAMA KDQAVENILV SPVVVASSLG LVSLGGKATT ASQAKAVLSA EQLRDEEVHA GLGELLRSLS NSTARNVTWK LGSRLYGPSS VSFADDFVRS SKQHYNCEHS KINFRDKRSA LQSINEWAAQ TTDGKLPEVT KDVERTDGAL LVNAMFFKPH WDEKFHHKMV DNRGFMVTRS YTVGVMMMHR TGLYNYYDDE KEKLQIVEMP LAHKLSSLII LMPHHVEPLE RLEKLLTKEQ LKIWMGKMQK KAVAISLPKG VVEVTHDLQK HLAGLGLTEA IDKNKADLSR MSGKKDLYLA SVFHATAFEL DTDGNPFDQD IYGREELRSP KLFYADHPFI FLVRDTQSGS LLFIGRLVRP KGDKMRDEL.

Precautions

SERPINH1 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P50454)