

Datasheet for ABIN7317578

HSPD1 Protein (GST tag,His tag)[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	HSPD1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This HSPD1 protein is labelled with GST tag,His tag.

Product Details

Purpose:	Recombinant Human HSPD1/HSP60 Protein (His & GST Tag)
Sequence:	Leu 2-Phe 573
Characteristics:	A DNA sequence encoding the human HSP60 (NP_955472.1) (Leu 2-Phe 573) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.

Target Details

Target:	HSPD1
Alternative Name:	HSPD1/HSP60 (HSPD1 Products)
Background:	Background: HSPD1, also known as HSP60, is a member of the chaperonin family. HSPD1 may function as a signaling molecule in the innate immune system. This protein is essential for the folding and assembly of newly imported proteins in the mitochondria. It may also prevent misfolding and promote the refolding and proper assembly of unfolded polypeptides generated

Target Details

under stress conditions in the mitochondrial matrix. HSPD1 gene is adjacent to a related family member and the region between the 2 genes functions as a bidirectional promoter. Several pseudogenes have been associated with this gene. Mutations associated with this gene cause autosomal recessive spastic paraplegia 13. Defects in HSPD1 are a cause of spastic paraplegia autosomal dominant type 13 (SPG13). Spastic paraplegia is a degenerative spinal cord disorder characterized by a slow, gradual, progressive weakness and spasticity of the lower limbs. Defects in HSPD1 are the cause of leukodystrophy hypomyelinating type 4 (HLD4); also called mitochondrial HSP60 chaperonopathy or MitCHAP-60 disease. HLD4 is a severe autosomal recessive hypomyelinating leukodystrophy. HSPD1 is clinically characterized by infantile-onset rotary nystagmus, progressive spastic paraplegia, neurologic regression, motor impairment, profound mental retardation. Death usually occurs within the first two decades of life. Immune Checkpoint Immunotherapy Cancer Immunotherapy Targeted Therapy

Synonym: CPN60;GROEL;HLD4;HSP-60;HSP60;HSP65;HuCHA60;SPG13

Molecular Weight: 88.7 kDa

NCBI Accession: [NP_955472](#)

Pathways: [Activation of Innate immune Response](#), [Regulation of Leukocyte Mediated Immunity](#), [Positive Regulation of Immune Effector Process](#), [Production of Molecular Mediator of Immune Response](#), [Positive Regulation of Endopeptidase Activity](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile PBS, pH 7.4

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.