

Datasheet for ABIN1686691

HSPD1 Protein (partial)[Go to Product page](#)**1** Image**2** Publications

Overview

Quantity:	100 µg
Target:	HSPD1
Protein Characteristics:	partial
Origin:	Bacteria
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Functional Studies (Func)

Product Details

Sequence:	EDPYEKIGAE LVKEVAKKTD DVAGDGTSTA TVLAQALVRE GLRNVAAGAN PLGLKRGIEK AVEKVTETLL KGAKEVETKE QIAATAAISA GDQSIGDLIA EAMDKVGNEG VITVEESNTF GLQLELTEGM RFDKGYISGY FVTDPERQEA VLEDPYILLV SSKVSTVKDL LPLXXXXXXXX GKPLIIAED VEGEALSTLV
Specificity:	~65 kDa
Purification:	Multi-Step Purified
Purity:	>90%

Target Details

Target:	HSPD1
Abstract:	HSPD1 Products
Background:	HSP65 isolated from Mycobacterium bovis BCG, is a member of the HSP60 family of heat

Target Details

shock proteins (2, 3). HSP60s are mitochondrial chaperonins that are typically held responsible for the transportation and refolding of proteins from the cytoplasm into the mitochondrial matrix. In addition to its role as a heat shock protein, HSP60 functions as a chaperonin to assist in folding linear amino acid chains into their respective three-dimensional structure. HSP60s are a ubiquitous class of HSPs that specifically promote the folding and assembly of cellular polypeptides in an ATP-dependent manner (1). Specifically, sequence comparison of HSP65 from different mycobacterium strains showed that the protein sequence of *M. bovis* BCG is identical to that of *M. tuberculosis*, and very similar to that of *M. leprae*, the pathogens that cause tuberculosis and tuberculoid leprosy, respectively (2,4). *Mycobacterium bovis* BCG HSP65 was identified as the immunodominant antigen during mycobacterial diseases and vaccination. It is also believed to be the antigen that induces autoimmune disease, such as adjuvant arthritis in rats (5, 6).

Molecular Weight: approx. 65 kDa

UniProt: [Q1EHB9](#)

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

Application Notes: Optimal working dilution should be determined by the investigator.

Comment: This product has been certified >90% pure using SDS-PAGE analysis.

Restrictions: For Research Use only

Handling

Concentration: Lot specific

Buffer: 10 mM Tris pH 8, 105 mM NaCl, 5 mM EDTA

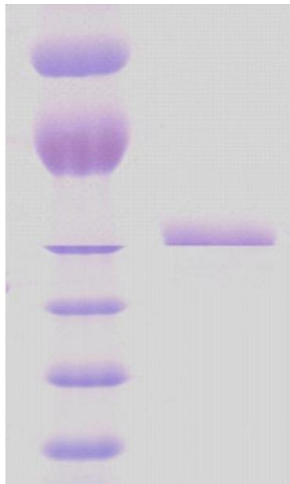
Storage: -20 °C

Publications

Product cited in: Sun, Shen, Liu, Tan, Tian, Luo, Lai, Dai, Guo: "Heat shock protein 65 promotes atherosclerosis through impairing the properties of high density lipoprotein." in: **Atherosclerosis**, Vol. 237, Issue 2, pp. 853-61, (2014) ([PubMed](#)).

Adamus, Bonnah, Brown, David: "Detection of autoantibodies against heat shock proteins and collapsin response mediator proteins in autoimmune retinopathy." in: **BMC ophthalmology**, Vol. 13, pp. 48, (2013) ([PubMed](#)).

Images



SDS-PAGE

Image 1. SDS-PAGE of 65 kDa M. Bovis Hsp65 protein (ABIN1686690, ABIN1686691 and ABIN1686692).