

Datasheet for ABIN390772  
**anti-HSPD1 antibody (N-Term)**

## 5 Images

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## Overview

Quantity:	400 µL
Target:	HSPD1
Binding Specificity:	AA 80-109, N-Term
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This HSPD1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

## Product Details

Immunogen:	This Hsp 60 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 80-109 amino acids from the N-terminal region of human Hsp 60.
Clone:	RB19532
Isotype:	Ig Fraction
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

## Target Details

Target:	HSPD1
Alternative Name:	Hsp 60 ( <a href="#">HSPD1 Products</a> )
Background:	Hsp60 is a member of a highly conserved family which includes molecular chaperones from

## Target Details

several species such as plant Hsp60 (known as Rubisco binding protein), GroEL, the E.coli Hsp60 and 65 kDa major antigen of mycobacteria. In eukaryotes, Hsp60 is localized in the mitochondrial matrix and in plants Hsp60 is localized in the chloroplast. Mitochondria, chloroplasts and bacteria have a common ancestry (>1 billion years) and this fact together with the high degree of homology between the divergent Hsp60s would indicate that these proteins carry out a primitive but important function which is similar to all of these different species. The common characteristics of the Hsp60s from the divergent species are i) high abundance, ii) induction with environmental stress such as heat shock, iii) homo oligomeric structures of either 7 or 14 subunits which reversibly dissociate in the presence of magnesium ions and ATP, iv) ATPase activity and v) a role in folding and assembly of oligomeric protein structures. These similarities are supported by recent studies where the single ring human mitochondrial homolog, Hsp60 with its co chaperonin, Hsp10 were expressed in a E. coli strain, engineered so that the groE operon is under strict regulatory control. This study has demonstrated that expression of Hsp60-Hsp10 was able to carry out all essential in vivo functions of GroEL and its co chaperonin, GroES. Consistent with their functions as chaperones, Hsp60 and Hsp10 have been suggested to act as docking molecules with a passive role in the maturation of caspase processing. Data demonstrates that recombinant Hsp60 and Hsp10 have been shown to accelerate the activation of procaspase 3 by cytochrome c and dATP in an ATP dependent manner. Hsps are intracellular proteins which are thought to serve protective functions against infection and cellular stress, however several recent studies indicate that members of the Hsp60 family are linked to a number of autoimmune diseases, atherosclerosis and chlamydial disease.

Molecular Weight:	54794
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Gene ID:	51182
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NCBI Accession:	<a href="#">NP_057383</a>
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UniProt:	<a href="#">Q0VDF9</a>
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Pathways:	<a href="#">Activation of Innate immune Response</a> , <a href="#">Regulation of Leukocyte Mediated Immunity</a> , <a href="#">Positive Regulation of Immune Effector Process</a> , <a href="#">Production of Molecular Mediator of Immune Response</a> , <a href="#">Positive Regulation of Endopeptidase Activity</a>
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## Application Details

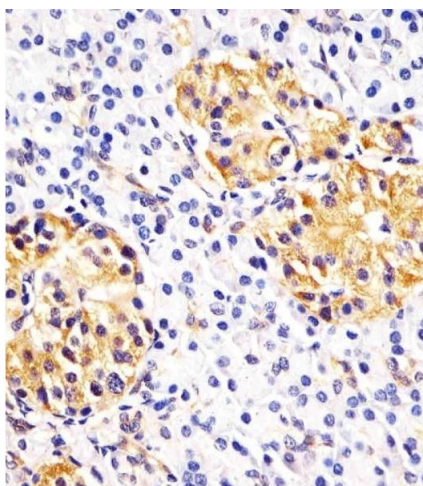
Application Notes:	WB: 1:2000. WB: 1:2000. WB: 1:1000. IHC-P: 1:50~100. IHC-P: 1:25
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Restrictions:	For Research Use only
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## Handling

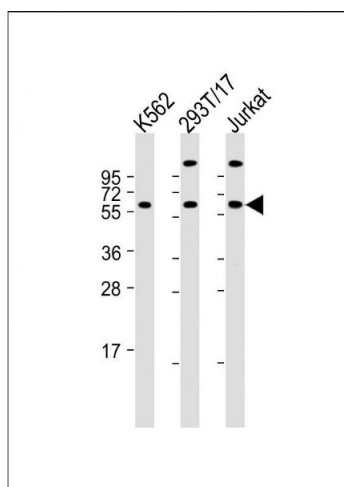
Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small aliquots to prevent freeze-thaw cycles.
Expiry Date:	6 months

## Images



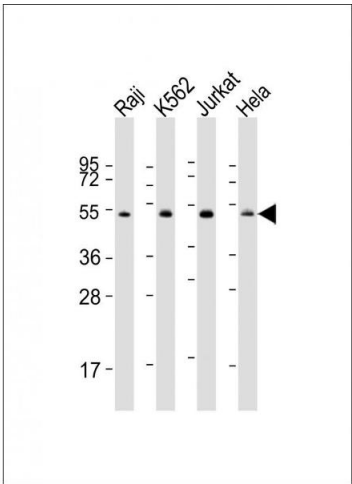
### Immunohistochemistry (Paraffin-embedded Sections)

**Image 1.** (ABIN390772 and ABIN2841030) staining Hsp 60 in human pancreas sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3 % BSA for 0.5 hour at room temperature, antigen retrieval was by heat mediation with a citrate buffer (pH 6). Samples were incubated with primary antibody (1/25) for 1 hour at 37 °C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



### Western Blotting

**Image 2.** All lanes : Anti-Hsp 60 Antibody (N-term) at 1:2000 dilution Lane 1: K562 whole cell lysate Lane 2: 293T/17 whole cell lysate Lane 3: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 55 kDa Blocking/Dilution buffer: 5 % NFDM/TBST.



### Western Blotting

**Image 3.** All lanes : Anti-Hsp 60 Antibody (N-term) at 1:2000 dilution Lane 1: Raji whole cell lysates Lane 2: K562 whole cell lysates Lane 3: Jurkat whole cell lysates Lane 4: HeLa whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 55 kDa Blocking/Dilution buffer: 5 % NFDM/TBST.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN390772.