



# Rabbit Anti-Human HSPD1 Polyclonal Antibody (CABT-L2115)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

|                           |                                                                                                                                                                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b>   | Polyclonal Antibody to Heat Shock 60kD Protein 1, Chaperonin (Knockout Validated)                                                                                                |
| <b>Specificity</b>        | The antibody is a rabbit polyclonal antibody raised against HSPD1. It has been selected for its ability to recognize HSPD1 in immunohistochemical staining and western blotting. |
| <b>Target</b>             | HSPD1                                                                                                                                                                            |
| <b>Immunogen</b>          | Recombinant fragment corresponding to human HSPD1 (Met1~Phe573)                                                                                                                  |
| <b>Isotype</b>            | IgG                                                                                                                                                                              |
| <b>Source/Host</b>        | Rabbit                                                                                                                                                                           |
| <b>Species Reactivity</b> | Human, Rat                                                                                                                                                                       |
| <b>Purification</b>       | Antigen-specific affinity chromatography followed by Protein A affinity chromatography                                                                                           |
| <b>Conjugate</b>          | Unconjugated                                                                                                                                                                     |
| <b>Applications</b>       | WB                                                                                                                                                                               |
| <b>Format</b>             | Liquid                                                                                                                                                                           |
| <b>Concentration</b>      | Lot specific                                                                                                                                                                     |
| <b>Size</b>               | 200 µg                                                                                                                                                                           |
| <b>Buffer</b>             | Supplied as solution form in 0.01M PBS with 50% glycerol, pH7.4.                                                                                                                 |
| <b>Preservative</b>       | 0.05% Proclin-300                                                                                                                                                                |

|                |                                                                                                             |
|----------------|-------------------------------------------------------------------------------------------------------------|
| <b>Storage</b> | Avoid repeated freeze/thaw cycles. Store at 4°C for frequent use. Aliquot and store at -20°C for 12 months. |
| <b>Ship</b>    | 4°C with ice bags                                                                                           |

## BACKGROUND

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| <b>Introduction</b> | This gene encodes a member of the chaperonin family. The encoded mitochondrial protein 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. This 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. Two transcript variants encoding the same protein have been identified for this gene. Mutations associated with this gene cause autosomal recessive spastic paraplegia 13. [provided by RefSeq, Jun 2010] |
| <b>Keywords</b>     | HSP60;GROEL;CPN60;HuCHA60;Heat Shock Protein 60;Spastic Paraplegia 13,Autosomal Dominant;60 kDa chaperonin;Mitochondrial matrix protein P1;P60 lymphocyte protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## GENE INFORMATION

|                            |                                                                                                                                                                                                                                                                                                            |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>           | HSPD1 heat shock 60kDa protein 1 (chaperonin) [ Homo sapiens (human) ]                                                                                                                                                                                                                                     |
| <b>Official Symbol</b>     | HSPD1                                                                                                                                                                                                                                                                                                      |
| <b>Synonyms</b>            | HSPD1; heat shock 60kDa protein 1 (chaperonin); HLD4; CPN60; GROEL; HSP60; HSP65; SPG13; HSP-60; HuCHA60; 60 kDa heat shock protein, mitochondrial; chaperonin 60; 60 kDa chaperonin; heat shock protein 65; P60 lymphocyte protein; mitochondrial matrix protein P1; short heat shock protein 60 Hsp60s1; |
| <b>Entrez Gene ID</b>      | <a href="#">3329</a>                                                                                                                                                                                                                                                                                       |
| <b>Protein Refseq</b>      | NP_002147                                                                                                                                                                                                                                                                                                  |
| <b>UniProt ID</b>          | <a href="#">A0A024R3X4</a>                                                                                                                                                                                                                                                                                 |
| <b>Chromosome Location</b> | 2q33.1                                                                                                                                                                                                                                                                                                     |
| <b>Pathway</b>             | Legionellosis; Metabolism of proteins; Mitochondrial protein import; RNA degradation; SIDS Susceptibility Pathways; Tuberculosis; Type I diabetes mellitus; Validated targets of C-MYC transcriptional activation;                                                                                         |
| <b>Function</b>            | ATP binding; ATPase activity; DNA replication origin binding; chaperone binding; double-stranded RNA binding; lipopolysaccharide binding; p53 binding; poly(A) RNA binding; protein binding; single-stranded DNA binding; ubiquitin protein ligase binding; unfolded protein binding;                      |