

Rabbit anti-Mouse HSP60 Polyclonal Antibody | anti-HSPD1 antibody

Anti-HSP60 Antibody, Rabbit Polyclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA257195	Rabbit	Mouse	Immunoprecipitation, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, ELISA, Western Blot

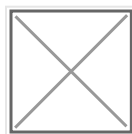
PRODUCT SYNONYMS

HSP60; Polyclonal Antibody; Anti-HSP60 Antibody; Rabbit Polyclonal; HSP60/HSPD1 Antibody; Rabbit PAb; Antigen Affinity Purified; heat shock 60kDa protein 1 (chaperonin); Anti-60kDa Antibody; Anti-Hsp60 Antibody; anti-HSPD1 antibody

PRODUCT SPECIFICATIONS

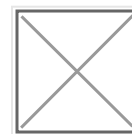
Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Mouse HSP60/HSPD1
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-HSPD1 antibody	IP (Immunoprecipitation), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Immunogen	Recombinant Mouse HSP60/HSPD1 Protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Mouse HSP60/HSPD1 (rM HSP60/HSPD1). HSP60/HSPD1 specific IgG was purified by Mouse HSP60/HSPD1 affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES



IP (Immunoprecipitation)

mHSP60 was immunoprecipitated using: Lane A: 0.5 mg NIH3T3 Whole Cell Lysate 4 uL anti-mHSP60 rabbit polyclonal antibody and 60 ug of Immunomagnetic beads Protein A/G. Primary antibody: Anti-mHSP60 rabbit polyclonal antibody, at 1:100 dilution. Secondary antibody: Clean-Blot IP Detection Reagent (HRP) at 1:1000 dilution. Developed using the ECL technique. Performed under reducing conditions. Predicted band size: 60 kDa. Observed band size: 60 kDa.



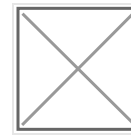
IF (Immunofluorescence)

Immunofluorescence staining of mouse HSPD1 in NIH-3T3 cells. Cells were fixed with 4% PFA, permeabilized with 0.1% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-Mouse HSPD1 polyclonal antibody (dilution ratio 1:200) at 4 degree C overnight. Then cells were stained with the Alexa Fluor 488-conjugated Goat Anti-rabbit IgG secondary antibody (green) and counterstained with DAPI (blue). Positive staining was localized to Mitochondrion.



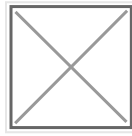
IHC (Immunohistochemistry)

Immunochemical staining of mouse HSP60 in mouse kidney with rabbit polyclonal antibody at 1:1000 dilution, formalin-fixed paraffin embedded sections.



IHC (Immunohistochemistry)

Immunochemical staining of mouse HSP60 in mouse liver with rabbit polyclonal antibody at 1:1000 dilution, formalin-fixed paraffin embedded sections.



WB (Western Blot)

Anti-HSP60 rabbit polyclonal antibody at 1:10000 dilution Lane A: NIH-3T3 Whole Cell Lysate Lane B: Raw264.7 Whole Cell Lysate Lysates/proteins at 30 ug per lane. Secondary Goat Anti-Rabbit IgG (H+L)/HRP at 1/10000 dilution. Developed using the ECL technique. Performed under reducing conditions. Predicted band size: 60 kDa Observed band size: 60 kDa

ADDITIONAL INFORMATION

Related Product Information for anti-HSPD1 antibody

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 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.

References

Hansen J J, et al. (2002) Hereditary spastic paraplegia SPG13 is associated with a mutation in the gene encoding the mitochondrial chaperonin Hsp60. Am J Hum Genet. 70: 1328-32.
Magen D, et al. (2008) Mitochondrial Hsp60 chaperonopathy causes an autosomal-recessive neurodegenerative disorder linked to brain hypomyelination and leukodystrophy. Am J Hum Genet. 83: 30-42.
Venner TJ, et al. (1990) Nucleotide sequences and novel structural features of human and Chinese hamster hsp60 (chaperonin) gene families. DNA Cell Biol. 9 (8): 545-52.

NCBI AND UNIPROT INFORMATION

NCBI GI #	183396771
NCBI GeneID	15510
NCBI Accession #	NP_034607.3
NCBI GenBank Nucleotide #	NM_010477.4
UniProt Accession #	P63038; P19226; P19227; P97602; Q3KQP2; Q3UIP0; Q8C2C7; Q8VEF4
Molecular Weight	27,015 Da
NCBI Official Full Name	60 kDa heat shock protein, mitochondrial
NCBI Official Synonym Full Names	heat shock protein 1 (chaperonin)
NCBI Official Symbol	Hspd1
NCBI Official Synonym Symbols	60kDa; CPN60; Hsp60; HSP-60; HSP-65
NCBI Protein Information	60 kDa heat shock protein, mitochondrial

UniProt Protein Name	60 kDa heat shock protein, mitochondrial
UniProt Gene Name	Hspd1
UniProt Synonym Gene Names	Hsp60; CPN60; HSP-60; Hsp60

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/hsp60-antibody-immunoprecipitation-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/257195>