HSPD1 monoclonal antibody, clone LK1

Catalog # MAB1460 Size 100 ug

Specification

Product Description	Mouse monoclonal antibody raised against full length recombinant HSPD1.
Immunogen	Recombinant protein corresponding to full length human HSPD1.
Host	Mouse
Theoretical MW (kDa)	61
Reactivity	Chicken, Human, Rat
Form	Lyophilized
Purification	Affinity purification
Isotype	IgG1
Recommend Usage	Western Blot (2-4 ug/mL) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (4-8 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from 1.2% sodium acetate (2 mg BSA, 0.01 mg sodium azide)
Storage Instruction	Store at -20°C on dry atmosphere. After reconstitution with 1 mL of 1.2% sodium acetate or neutral PBS and concentration will be 100 u g/mL, store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

- Western Blot
- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Gene Info — HSPD1

Entrez GeneID	3329
Gene Name	HSPD1
Gene Alias	CPN60, GROEL, HLD4, HSP60, HSP65, HuCHA60, SPG13
Gene Description	heat shock 60kDa protein 1 (chaperonin)
Omim ID	118190 605280
Gene Ontology	Hyperlink
Gene Summary	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. Two pseudogenes, both located on chromosome 8, 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
Other Designations	P60 lymphocyte protein|chaperonin|heat shock 60kD protein 1 (chaperonin)|heat shock protein 65|mitochondrial heat shock 60kD protein 1 variant 1|mitochondrial matrix protein P1|short heat shock protein 60 Hsp60s1|spastic paraplegia 13 (autosomal dominant)

Publication Reference

- Genomic structure of the human mitochondrial chaperonin genes: HSP60 and HSP10 are localised head to head on chromosome 2 separated by a bidirectional promoter.

  Hansen JJ, Bross P, Westergaard M, Nielsen MN, Eiberg H, Børglum AD, Mogensen J, Kristiansen K, Bolund L, Gregersen N.

  Human Genetics 2003 Jan; 112(1):71.

- Mitochondrial heat-shock protein hsp60 is essential for assembly of proteins imported into yeast mitochondria.

  Cheng MY, Hartl FU, Martin J, Pollock RA, Kalousek F, Neupert W, Hallberg EM, Hallberg RL, Horwich AL.

  Nature 1989 Feb; 337(6208):620.

Pathway

- RNA degradation

- Type I diabetes mellitus

Disease

- Alzheimer disease
- Arthritis
- Cardiovascular Diseases
- Coronary Disease
- Diabetes Complications
- Diabetes Mellitus
- Disease Progression
- Genetic Predisposition to Disease
- Metabolic Syndrome X
- Multiple Sclerosis
- Neoplasms
- Osteoporosis
- Spastic Paraplegia