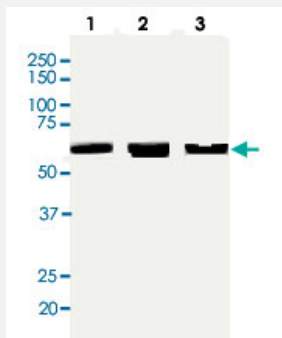


# HSPD1 monoclonal antibody, clone 2E9

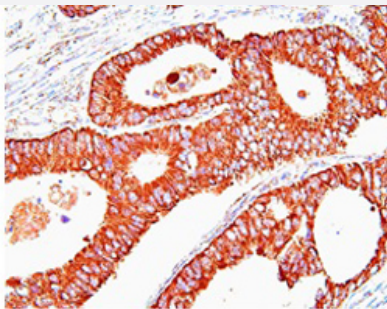
Catalog # MAB1121      Size 100 uL

## Applications



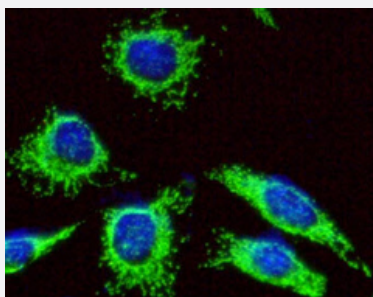
### Western Blot (Cell lysate)

Western blot analysis of Lane 1: 293T cell lysate, Lane 2: HeLa cell lysate, Lane 3: A549 cell lysate.



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemistry of human colon cancer tissue were incubated with HSPD1 monoclonal antibody, clone 2E9 (1:50) for 2 hours at room temperature. Antigen retrieval was performed in 0.1M sodium citrate buffer and detected using Diaminobenzidine (DAB).



### Immunofluorescence

Immunofluorescence analysis of HeLa cells. The cell was stained with HSPD1 monoclonal antibody, clone 2E9 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

## Specification

### Product Description

Mouse monoclonal antibody raised against full length recombinant HSPD1.

### Immunogen

Recombinant protein corresponding to full length human HSPD1.

Host	Mouse
Reactivity	Human
Form	Liquid
Purification	Protein G purification
Isotype	IgG1, kappa
Recommend Usage	ELISA Immunocytochemistry Immunofluorescence Immunohistochemistry Western Blot The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH 7.4 (10% glycerol, 0.02% sodium azide).
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Applications

- Western Blot (Cell lysate)

Western blot analysis of Lane 1: 293T cell lysate, Lane 2: HeLa cell lysate, Lane 3: A549 cell lysate.

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

Immunohistochemistry of human colon cancer tissue were incubated with HSPD1 monoclonal antibody, clone 2E9 (1:50) for 2 hours at room temperature. Antigen retrieval was performed in 0.1M sodium citrate buffer and detected using Diaminobenzidine (DAB).

- Immunocytochemistry

- Immunofluorescence

Immunofluorescence analysis of HeLa cells. The cell was stained with HSPD1 monoclonal antibody, clone 2E9 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

- Enzyme-linked Immunoabsorbent Assay

## Gene Info — HSPD1

Entrez GeneID	<a href="#">3329</a>
GeneBank Accession#	<a href="#">NM_002156</a>
Protein Accession#	<a href="#">NP_002147</a>
Gene Name	HSPD1
Gene Alias	CPN60, GROEL, HLD4, HSP60, HSP65, HuCHA60, SPG13
Gene Description	heat shock 60kDa protein 1 (chaperonin)
Omim ID	<a href="#">118190 605280</a>
Gene Ontology	<a href="#">Hyperlink</a>
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

- [Hsp60 regulation of tumor cell apoptosis.](#)

Ghosh JC, Dohi T, Kang BH, Altieri DC.

The Journal of Biological Chemistry 2008 Feb; 283(8):5188.

Application: IHC, WB, WB-Tr, Human, HCT116, MCF-7 cells, breast, colon, lung adenocarcinomas

- [The mitochondrial chaperonin hsp60 is required for its own assembly.](#)

Cheng MY, Hartl FU, Horwich AL.

Nature 1990 Nov; 348(6300):455.

Application: WB-Tr, Rabbit, Rabbit reticulocytes

## 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](#)