



Rabbit Anti-IMPDH1 antibody

SL6256R

Product Name:	IMPDH1
Chinese Name:	肌苷单磷酸脱氢酶1抗体
Alias:	IMDH1_HUMAN; IMP (inosine monophosphate) dehydrogenase 1; IMP dehydrogenase 1; IMPD 1; IMPD; IMPD1; IMPDH 1; IMPDH I; IMPDH-I; Impdh1; Inosine 5' monophosphate dehydrogenase 1; Inosine monophosphate dehydrogenase 1; Inosine-5''-monophosphate dehydrogenase 1; Inosine-5'-monophosphate dehydrogenase 1; LCA11; RP10.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Rabbit,Guinea Pig,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	55kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human IMPDH1:301-400/599
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The protein encoded by this gene acts as a homotetramer to regulate cell growth. The encoded protein is an enzyme that catalyzes the synthesis of xanthine monophosphate (XMP) from inosine-5'-monophosphate (IMP). This is the rate-limiting step in the de

novo synthesis of guanine nucleotides. Defects in this gene are a cause of retinitis pigmentosa type 10 (RP10). Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2008].

Function:

Catalyzes the conversion of inosine 5'-phosphate (IMP) to xanthosine 5'-phosphate (XMP), the first committed and rate-limiting step in the de novo synthesis of guanine nucleotides, and therefore plays an important role in the regulation of cell growth. Could also have a single-stranded nucleic acid-binding activity and could play a role in RNA and/or DNA metabolism. It may also have a role in the development of malignancy and the growth progression of some tumors.

Subunit:

Homotetramer.

Subcellular Location:

Cytoplasm. Nucleus.

Tissue Specificity:

IMP type I is the main species in normal leukocytes and type II predominates over type I in the tumor.

DISEASE:

Retinitis pigmentosa 10 (RP10) [MIM:180105]: A retinal dystrophy belonging to the group of pigmentary retinopathies. Retinitis pigmentosa is characterized by retinal pigment deposits visible on fundus examination and primary loss of rod photoreceptor cells followed by secondary loss of cone photoreceptors. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well. Note=The disease is caused by mutations affecting the gene represented in this entry.

Leber congenital amaurosis 11 (LCA11) [MIM:613837]: A severe dystrophy of the retina, typically becoming evident in the first years of life. Visual function is usually poor and often accompanied by nystagmus, sluggish or near-absent papillary responses, photophobia, high hyperopia and keratoconus. Note=The disease is caused by mutations affecting the gene represented in this entry.

Similarity:

Belongs to the IMPDH/GMPR family.

Contains 2 CBS domains.

SWISS:

P20839

Gene ID:

3614

Database links:

[Entrez Gene: 3614](#)Human

[Entrez Gene: 23917](#)Mouse

[Entrez Gene: 362329](#)Rat

[Omim: 146690](#)Human

[SwissProt: P20839](#)Human

[SwissProt: P50096](#)Mouse

[SwissProt: D3ZLZ7](#)Rat

[Unigene: 654401](#)Human

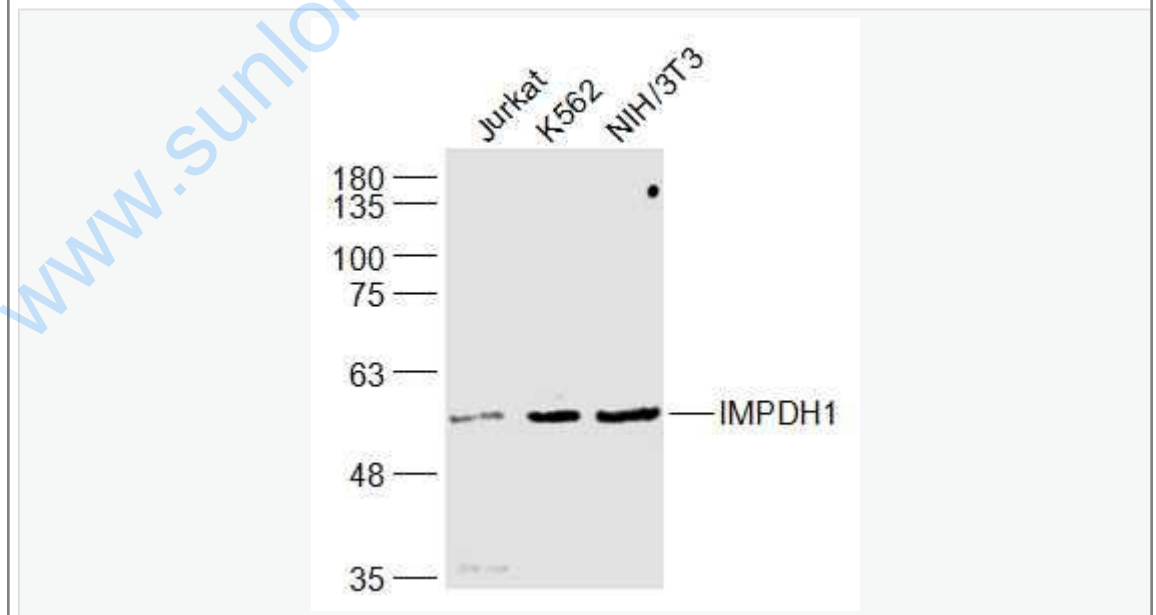
[Unigene: 260707](#)Mouse

[Unigene: 104925](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

Jurkat(Human) Cell Lysate at 30 ug

K562(Human) cell Lysate at 30 ug

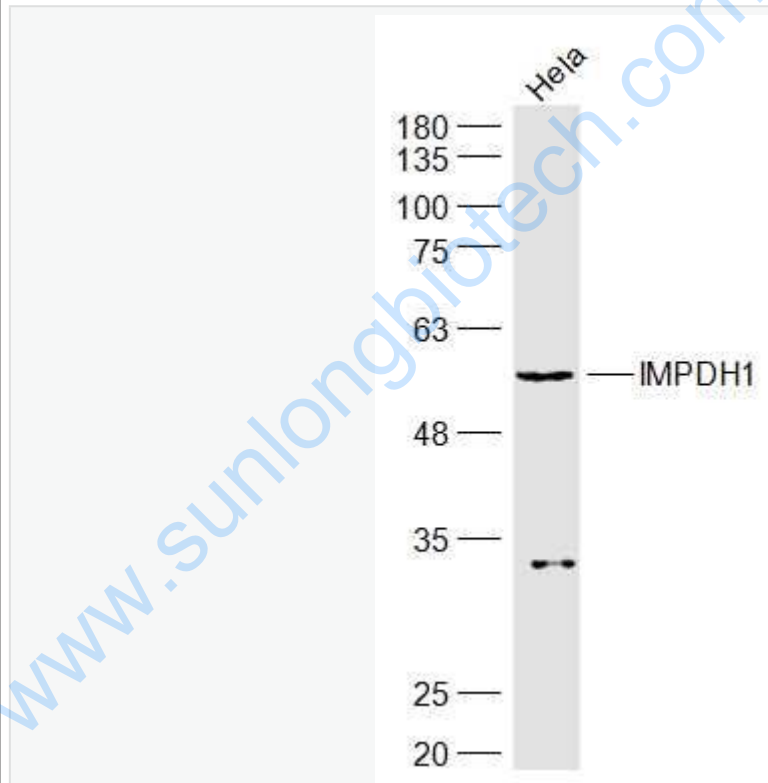
NIH/3T3(Mouse) Cell Lysate at 30 ug

Primary: Anti-IMPDH1 (SL6256R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 55 kD

Observed band size: 55 kD



Sample:

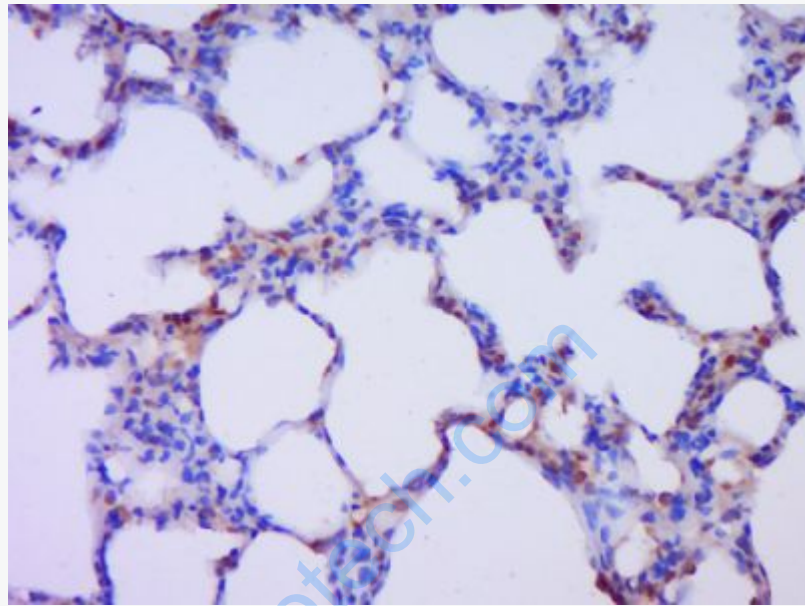
HeLa(Human) Cell Lysate at 30 ug

Primary: Anti-IMPDH1 (SL6256R) at 1/1000 dilution

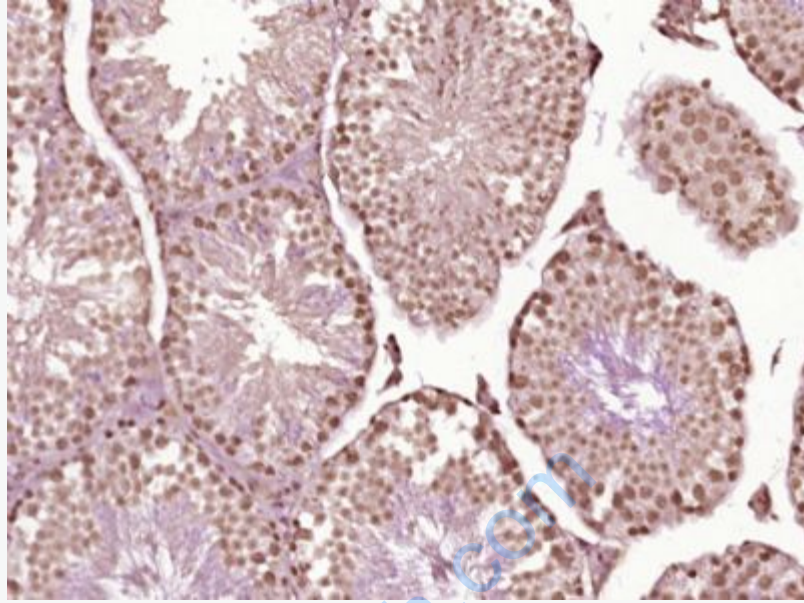
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 55 kD

Observed band size: 55 kD



Paraformaldehyde-fixed, paraffin embedded (Rat lung); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (IMPDH1) Polyclonal Antibody, Unconjugated (SL6256R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (IMPDH1) Polyclonal Antibody, Unconjugated (SL6256R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.