

Rabbit Anti-GRIM19 antibody

SL3594R

Product Name:	GRIM19
Chinese Name:	Interferon/维甲酸诱导凋亡相关基因抗体
Alias:	CDA016; Cell death regulatory protein; Cell death regulatory protein GRIM-19; CGI-39; CGI39 protein; CI-B16.6; GRIM-19; GRIM 19; Complex I-B16.6; Gene associated with retinoic and IFN-induced mortality 19 protein; Gene associated with retinoic and interferon-induced mortality 19 protein; Gene associated with retinoic interferon induced mortality 19 protein; GRIM-19; NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 13; NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 13; NADH ubiquinone oxidoreductase B16.6 subunit; Ndufa13.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Pig, Horse,
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:	16kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GRIM19:51-144/144
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:	A novel gene, Genes associated with Retinoid IFN induced Mortality (GRIM) GRIM19

gene was identified. Antisense expression of GRIM19 confers a strong resistance against IFN/RA induced death by reducing the intracellular levels of GRIM19 protein. Overexpression of GRIM19 enhances cell death in response to IFN/RA. GRIM19 is primarily a nuclear protein whose expression is induced by the IFN/RA combination. These data indicate that GRIM19 is a novel cell death regulatory molecule.

Function:

Accessory subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I), that is believed not to be involved in catalysis. Complex I functions in the transfer of electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is believed to be ubiquinone. Involved in the interferon/all-trans-retinoic acid (IFN/RA) induced cell death. This apoptotic activity is inhibited by interaction with viral IRF1. Prevents the transactivation of STAT3 target genes. May play a role in CARD15-mediated innate mucosal responses and serve to regulate intestinal epithelial cell responses to microbes.

Subunit:

Complex I is composed of 45 different subunits. Interacts with CARD15, but not with CARD4. Interacts with STAT3, but not with STAT1, STAT2 and STAT5A. Interacts with HHV-8 IRF1, in the nucleus, with HPV-16 E6 and SV40 LT. Interacts with OLFM4.

Subcellular Location:

Mitochondrion inner membrane; Single-pass membrane protein; Matrix side. Nucleus. Note=May be translocated into the nucleus upon IFN/RA treatment.

Tissue Specificity:

Widely expressed, with highest expression in heart, skeletal muscle, liver, kidney and placenta. In intestinal mucosa, down-regulated in areas involved in Crohn disease and ulcerative colitis.

DISEASE:

Defects in NDUFA13 may be a cause of susceptibility to Hurthle cell thyroid carcinoma (HCTC) [MIM:607464]. Hurthle cell thyroid carcinoma accounts for approximately 3% of all thyroid cancers. Although they are classified as variants of follicular neoplasms, they are more often multifocal and somewhat more aggressive and are less likely to take up iodine than are other follicular neoplasms.

Similarity:

Belongs to the complex I NDUFA13 subunit family.

SWISS:

O9P0J0

Gene ID:

51079

Database links:

Entrez Gene: 338084Cow

Entrez Gene: 51079Human

Entrez Gene: 67184Mouse

Entrez Gene: 314759Rat

Omim: 609435Human

SwissProt: Q95KV7Cow

SwissProt: Q9P0J0Human

SwissProt: Q9ERS2Mouse

Unigene: 534453Human

<u>Unigene: 21162</u>Mouse

Important Note:

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

GRIM19是GRIMs凋亡相关基因新家族成员之一,是一种由IFNβ联合RA(Interferon/维甲酸)诱导表达的16kDa蛋白,分布在The nucleus和胞浆中, GRIM-

19是纯化的Mitochondrion呼吸链复合体I的组成成分,这种复合物为ATP合成所必需的,当Mitochondrion复合物I电子转移产生活性,GRIM-

19突变体突破Mitochondrion跨膜电位,可增强细胞对凋亡刺激的敏感性,它的过高表达可以抑制Tumour细胞的增殖,促进细胞的凋亡。



Sample:

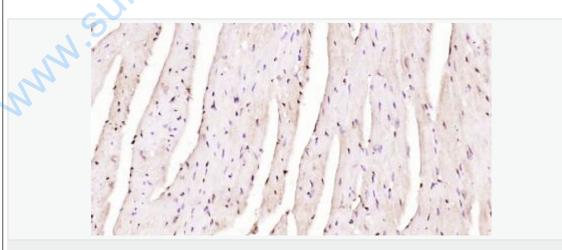
Liver (Mouse) Lysate at 40 ug

Primary: Anti-GRIM19 (SL3594R) at 1/1000 dilution

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

Predicted band size: 16 kD

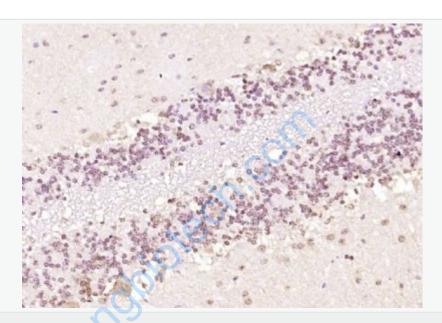
Observed band size: 17 kD



Paraformaldehyde-fixed, paraffin embedded (mouse heart tissue); 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

Picture:

37°C for 30min; Antibody incubation with (GRIM19) Polyclonal Antibody, Unconjugated (SL3594R) 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 cerebellum tissue); 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 (GRIM19) Polyclonal Antibody, Unconjugated (SL3594R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.