For Research Use Only

CISD1 Polyclonal antibody

Catalog Number:16006-1-AP Featured Product 39 Publications

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Basic Information

Catalog Number:
16006-1-AP

Size:
800 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG8680

GenBank Accession Number:
BC007043

GeneID (NCBI):
55847

UNIPROT ID:
Q9NZ45

Full Name:
CDGSH iron sulfur domain 1

Calculated MW:
108 aa, 12 kDa

Observed MW:
14-17 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:5000-1:50000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500
IF 1:50-1:500

Applications

Tested Applications:
FC, IF/ICC, IHC, IP, WB, ELISA

Cited Applications:
WB, IP, IF, IHC

Species Specificity:
human, mouse, rat

Cited Species:
human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : mouse kidney tissue, mouse skeletal muscle tissue, rat kidney tissue, rat skeletal muscle tissue

IP : HepG2 cells,

IHC : human pancreas cancer tissue,

IF : HepG2 cells,

Background Information

MitoNEET, also named CISD1, belongs to a previously uncharacterized ancient family of proteins for which the hallmark is the presence of a unique 39 amino acid CDGSH domain. It is a single-pass type III membrane protein, located in mitochondrion outer membrane and may play a role in regulating maximal capacity for electron transport and oxidative phosphorylation. MitoNEET is a recently identified drug target for a commonly prescribed diabetes drug, Pioglitazone. This antibody recognizing MitoNEET (calculated 12 kDa) as a 17 kDa protein may be due to its posttranslational modification or metal binding activity.

Notable Publications

Author	Pubmed ID	Journal	Application
Malte Gersch	28945249	Nat Struct Mol Biol	WB
Megan E Roche	32920118	Biochim Biophys Acta Mol Basis Dis	WB
Werner J Geldenhuys	28880525	ACS Chem Neurosci	WB,IHC,IF

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
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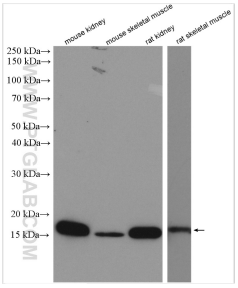
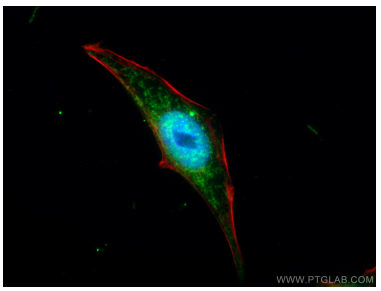
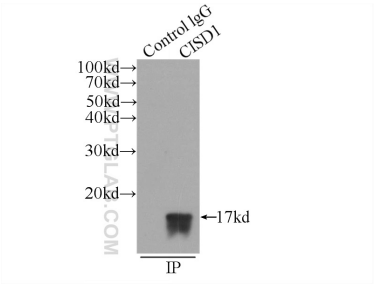
Selected Validation Data



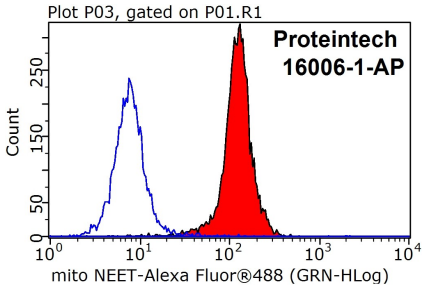
Various lysates were subjected to SDS PAGE followed by western blot with 16006-1-AP (CISD1 antibody) at dilution of 1:30000 incubated at room temperature for 1.5 hours.



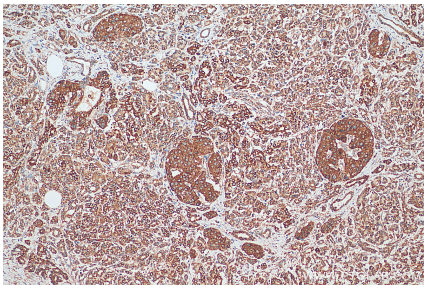
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CISD1 antibody (16006-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



IP result of anti-CISD1 (IP:16006-1-AP, 3ug; Detection:16006-1-AP 1:2000) with HepG2 cells lysate 600ug.



1X10^6 HeLa cells were stained with .05ug mitoNEET,CISD1 antibody (16006-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-Goat anti-Rabbit IgG with dilution 1:100.



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 16006-1-AP (CISD1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).