

# CISD1 Monoclonal antibody

Catalog Number: 68030-1-Ig

## Basic Information

<b>Catalog Number:</b> 68030-1-Ig	<b>GenBank Accession Number:</b> BC007043	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 55847	<b>CloneNo.:</b> 1D7E3
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> Q9NZ45	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:1000-1:4000 IF/ICC 1:200-1:800
<b>Isotype:</b> IgG1	<b>Full Name:</b> CDGSH iron sulfur domain 1	
<b>Immunogen Catalog Number:</b> AG8560	<b>Calculated MW:</b> 108 aa, 12 kDa <b>Observed MW:</b> 14-17 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, ELISA

**Species Specificity:**  
human, mouse, rat, pig, rabbit, chicken

**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:** LNCaP cells, HeLa cells, HEK-293 cells, pig brain tissue, rabbit brain tissue, rat brain tissue, mouse brain tissue, chicken brain tissue, mouse cerebellum tissue

**IHC:** human pancreas cancer tissue,

**IF/ICC:** H9C2 cells,

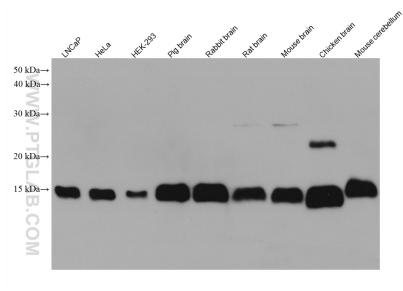
## Background Information

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.

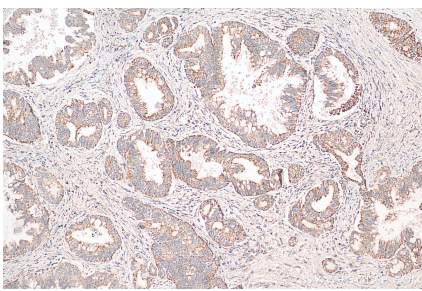
## Storage

**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

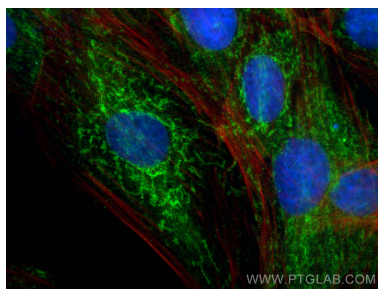
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68030-1-Ig (CISD1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 68030-1-Ig (CISD1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed H9C2 cells using CISD1 antibody (68030-1-Ig, Clone: 1D7E3 ) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-phalloidin (red).