

For Research Use Only

OGG1 Polyclonal antibody

Catalog Number: 15125-1-AP

32 Publications



Basic Information

Catalog Number:

15125-1-AP

Size:

150ul, Concentration: 700 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG7204

GenBank Accession Number:

BC000657

GeneID (NCBI):

4968

UNIPROT ID:

O15527

Full Name:

8-oxoguanine DNA glycosylase

Calculated MW:

22 kDa, 36-40 kDa, 45-57 kDa

Observed MW:

36-40 kDa, 45-50 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig

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 : A549 cells, Transfected HEK-293 cells, HeLa cells, mouse skeletal muscle tissue, rat skeletal muscle tissue

IP : mouse heart tissue,

IHC : mouse liver tissue,

IF/ICC : A431 cells,

Background Information

The DNA damages induced by ROS contain base modification, base loss, and DNA single strand breaks, which are usually repaired by the base excision repair (BER) pathway in both prokaryotes and eukaryotes. OGG1 (The human 8-oxoguanine glycosylase 1) is the primary enzyme in BER pathway, responsible for the excision of 7, 8-dihydro-8-oxoguanine (8-oxoG), a mutagenic base byproduct that occurs as a result of exposure to reactive oxygen species. There's 8 isoforms of OGG1, with calculated MW 22 kDa, 36-40 kDa and 45-57 kDa. The difference among these isoforms is the C-terminal (317-345aa). Our OGG1 antibody detects all the isoforms. We always got the strongest 47 kDa corresponds to isoform Beta in our detection and some weaker bands (with long time exposure). The expression amount of Beta is higher than other isoforms from our data. This antibody has been cited in more than 4 publications, WB and IHC detection in mouse and human.

Notable Publications

Author	Pubmed ID	Journal	Application
Zhijian Zheng	36280140	Cell Mol Gastroenterol Hepatol	WB
Jie Fan	36435451	Virol Sin	WB,IF
Rachel Adihe Lokanga	24858908	Hum Mol Genet	WB

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

*** 20ul sizes contain 0.1% BSA

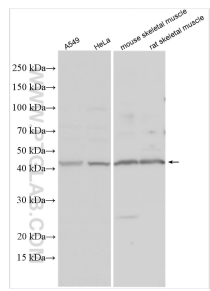
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

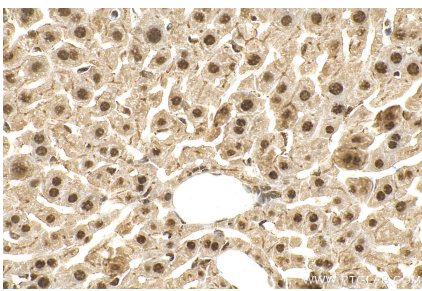
E: proteintech@ptglab.com
W: ptglab.com

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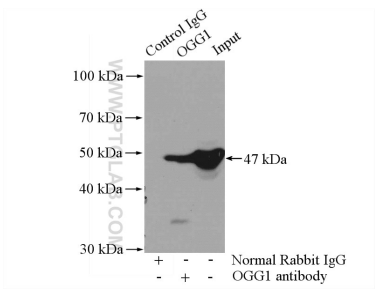
Selected Validation Data



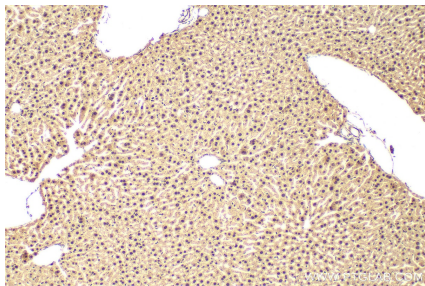
Various lysates were subjected to SDS PAGE followed by western blot with 15125-1-AP (OGG1 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



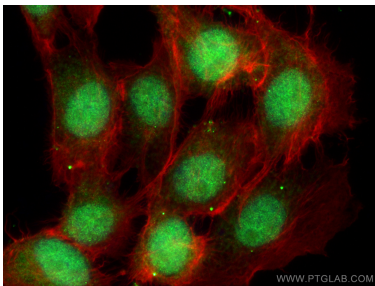
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 15125-1-AP (OGG1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-OGG1 (IP:15125-1-AP, 4ug; Detection:15125-1-AP 1:500) with mouse heart tissue lysate 3200ug.



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 15125-1-AP (OGG1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed A431 cells using OGG1 antibody (15125-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).