For Research Use Only

NBR1
Polyclonal ANTIBODY
Catalog Number: 16004-1-AP

Basic Information
Catalog Number: 16004-1-AP
Size: 63 μg/150 μl
Source: Rabbit
Isotype: IgG
Purification Method: Antigen affinity purification
Immunogen Catalog Number: AG8652

GenBank Accession Number: BC008008
GeneID (NCBI): 4077
Full Name: neighbor of BRCA1 gene 1
Calculated MW: 966aa, 107 kDa
Observed MW: 140 kDa

Recommended Dilutions:
WB 1:500-1:1000
IP 0.5-4.0 μg for IP and 1:1000-1:1000 for WB
IHC 1:50-1:100

Applications
Tested Applications: FC, IF, IHC, IP, WB, ELISA
Cited Applications: IF, IHC, WB
Species Specificity: human, mouse, rat, monkey
Cited Species: dog, human, mouse

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

Background Information
NBR1, also named as 1A13B, KIAA0049 and M17S2, acts probably as a receptor for selective autophagosomal degradation of ubiquitinated targets. NBR1 and P62 can bind to autophagic effector proteins (Atg8 in yeast, MAP1LC3 protein family in mammals) anchored in the membrane of autophagosomes. It is a highly conserved multidomain scaffold protein with proposed roles in endocytic trafficking and selective autophagy. NBR1 is a novel PB1 adapter in Th2 differentiation and asthma. It functions as an autophagy receptor involved in targeting ubiquitinated proteins for degradation. It also has a dual role as a scaffold protein to regulate growth-factor receptor and downstream signaling pathways. Observed MW of NBR1 is 140 kDa (PMID: 22654911, PMID: 22484440).

Notable Publications

<table>
<thead>
<tr>
<th>Author</th>
<th>Pubmed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hongyu Li</td>
<td>30160596</td>
<td>Autophagy</td>
<td>WB</td>
</tr>
<tr>
<td>Qiong Lin</td>
<td>26021346</td>
<td>J Cell Sci</td>
<td>WB</td>
</tr>
<tr>
<td>Patrick Ejlerskov</td>
<td>26451483</td>
<td>Cell</td>
<td>WB</td>
</tr>
</tbody>
</table>

Storage
Store at -20°C. Stable for one year after shipment.

Storage Buffer:
PBS with 0.05% 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:
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

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
Selected Validation Data

Immunohistochemistry of paraffin-embedded mouse heart tissue slide using 16004-1-AP (NBR1 antibody) at dilution of 1:200 (under 10x lens) heat mediated antigen retrieved with Tris-EDTA buffer (pH 9).

Immunohistochemistry of paraffin-embedded mouse heart tissue slide using 16004-1-AP (NBR1 antibody) at dilution of 1:200 (under 40x lens) heat mediated antigen retrieved with Tris-EDTA buffer (pH 9).

HeLa cells were subjected to SDS PAGE followed by western blot with 16004-1-AP/NBR1 antibody) all dilution of 1:1500 incubated at room temperature for 1.5 hours.

IP Result of anti-NBR1 (IP: 16004-1-AP, 4ug; Detection: 16004-1-AP, 1:800) with HeLa cells lysate 2500ug.

Immunofluorescent analysis of HeLa cells, using NBR1 antibody 16004-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).

1X10^6 HeLa cells were stained with 0.2ug NBR1 antibody (16004-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) with dilution 1:1500.