Product Datasheet

GADD153/CHOP Antibody
NBP2-13172-0.025ml

Unit Size: 0.025 ml
Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

Reviews: 1  Publications: 2

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP2-13172

Updated 6/15/2014 v.20.1
### Product Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Size</td>
<td>0.025 ml</td>
</tr>
<tr>
<td>Concentration</td>
<td>1.67 mg/ml</td>
</tr>
<tr>
<td>Storage</td>
<td>Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.</td>
</tr>
<tr>
<td>Clonality</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Preservative</td>
<td>0.02% Sodium Azide</td>
</tr>
<tr>
<td>Purity</td>
<td>Affinity purified</td>
</tr>
<tr>
<td>Buffer</td>
<td>PBS, pH 7.4</td>
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</table>

### Product Description

- **Host**: Rabbit
- **Gene ID**: 1649
- **Gene Symbol**: DDIT3
- **Species**: Human, Mouse, Rat, Primate
- **Species Reactivity**: Human, mouse, rat, and primate.
- **Marker**: ER Stress Marker
- **Immunogen**: A synthetic peptide made to an internal portion of the human CHOP/GADD153 protein (between residues 100-150) [UniProt P35638]

### Product Application Details

- **Applications**: Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin
- **Recommended Dilutions**: Immunohistochemistry 1:400, Immunohistochemistry-Paraffin 1:400, Western Blot 1:1000
- **Application Notes**: This CHOP/GADD153 antibody is useful for Western Blot and IHC-paraffin embedded sections. In Western Blot, bands are seen ~19 and 27 kDa in tunicamycin treated HeLa cells. In IHC-P, staining was observed in the cytoplasm of mouse colon tissue which represents the inactivated form of CHOP/GADD153. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended.
### Images

**Western Blot:** CHOP/GADD153 Antibody [NBP2-13172] - CHOP levels following treatment in human neuroblastoma. Image from verified customer review.

![Western Blot Image](image)

**Immunohistochemistry:** CHOP/GADD153 Antibody [NBP2-13172] - IHC staining of CHOP/GADD153 in mouse colon using DAB with hematoxylin counterstain.

![Immunohistochemistry Image](image)

**Western Blot:** CHOP/GADD153 Antibody [NBP2-13172] - WB analysis of CHOP/GADD153 in tunicamycin treated (+) and untreated (-) HeLa cell lysate.

![Western Blot Image](image)

### Publications

**Han Y, Yi W, Qin J et al.** Carbon monoxide offers neuroprotection from hippocampal cell damage induced by recurrent febrile seizures through the PERK-activated ER stress pathway. Neurosci. Lett. 2015 Jan 12 [PMID: 25434873] (WB, Rat)

Details:

CHOP/GADD153 rabbit polyclonal antibody used at 1:1000 dilution for WB on lysates of rat hippocampal neurons from experimental groups namely - control, FS (rat model of recurrent febrile seizures), FS + ZnPP-IX group (a CO synthase inhibitor), and FS + Hemin (a CO donor).

Procedures

Western Blot Protocol specific for CHOP/GADD153 antibody (NBP2-13172)
Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 40 ug of total protein per lane.
2. Transfer proteins to membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain according to standard Ponceau S procedure (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot.
5. Block the membrane using standard blocking buffer for at least 1 hour.
6. Wash the membrane in wash buffer three times for 10 minutes each.
7. Dilute primary antibody in blocking buffer and incubate 1 hour at room temperature.
8. Wash the membrane in wash buffer three times for 10 minutes each.
9. Apply the diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions. 

Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.

Immunohistochemistry-Paraffin Embedded Sections Protocol specific for CHOP/GADD153 antibody (NBP2-13172)
Immunohistochemistry-Paraffin Embedded Sections Protocol

Antigen Unmasking:
Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes.

Staining:
1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in wash buffer for 5 minutes.
3. Block each section with 100-400 ul blocking solution for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4 C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul biotinylated diluted secondary antibody. Incubate 30 minutes at room temperature.
7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
8. Add 100-400 ul Streptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
9. Wash sections three times in wash buffer for 5 minutes each.
10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
11. As soon as the sections develop, immerse slides in deionized water.
12. Counterstain sections in hematoxylin.
13. Wash sections in deionized water two times for 5 minutes each.
14. Dehydrate sections.
15. Mount coverslips.

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Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our guarantee, please visit www.novusbio.com/guarantee.