Product Datasheet

ATPB Antibody (4.3E8.D10)
NB600-1171

Unit Size: 100ug
Store at -20C. Avoid freeze-thaw cycles.

Publications: 2
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# ATPB Antibody (4.3E8.D10)

## Product Information

<table>
<thead>
<tr>
<th><strong>Unit Size</strong></th>
<th>100ug</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concentration</strong></td>
<td>1 mg/ml</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>Store at -20C. Avoid freeze-thaw cycles.</td>
</tr>
<tr>
<td><strong>Clonality</strong></td>
<td>Monoclonal</td>
</tr>
<tr>
<td><strong>Clone</strong></td>
<td>4.3E8.D10</td>
</tr>
<tr>
<td><strong>Preservative</strong></td>
<td>0.05% Sodium Azide</td>
</tr>
<tr>
<td><strong>Isotype</strong></td>
<td>IgG1</td>
</tr>
<tr>
<td><strong>Purity</strong></td>
<td>Immunogen affinity purified</td>
</tr>
<tr>
<td><strong>Buffer</strong></td>
<td>PBS with 1 mg/ml BSA</td>
</tr>
</tbody>
</table>

## Product Description

| **Host** | Mouse |
| **Gene ID** | 506 |
| **Gene Symbol** | ATP5B |
| **Species** | Human, Mouse, Rat |

**Reactivity Notes**

Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Additional Mouse on Mouse blocking steps may be required for IHC and ICC experiments. Please contact Technical Support for more information.

| **Marker** | Mitochondria Marker |

**Specificity/Sensitivity**

Detects the beta subunit of ATP synthase from mouse rat and human samples. This is useful as a mitochondrial marker.

| **Immunogen** | Intact rat mitochondria |

## Product Application Details

**Applications**

Western Blot, Immunocytochemistry/Immunofluorescence, In vitro assay, Immunoprecipitation

**Recommended Dilutions**

Western Blot 1 - 2 ug/ml, Immunocytochemistry/Immunofluorescence 1:100 - 1:1000, Immunoprecipitation 2 - 5 ug, In vitro assay

**Application Notes**

In Vivo assay usage was reported in scientific literatures. In IP: Detects an 50 kDa protein representing ATP synthase from solubilized rat brain mitochondria.

## Images

Immunocytochemistry/Immunofluorescence: ATPB Antibody (4.3E8.D10) [NB600-1171] - Analysis of ATP Synthase beta (red) in HEK293T cells. Cells fixed with 4% formaldehyde were permeabilized and blocked with 1X PBS containing 5% BSA and 0.3% Triton X-100 for 1 hour at room temperature. Cells were probed with an ATP Synthase beta monoclonal antibody at a dilution of 1:100 overnight at 4C in 1X PBS containing 1% BSA and 0.3% Triton X-100, washed with 1X PBS, and incubated with a fluorophore-conjugated goat anti-mouse IgG secondary antibody at a dilution of 1:200 for 1 hour at room temperature. Nuclei (blue) were stained with DAPI.

Immunocytochemistry/Immunofluorescence: ATPB Antibody (4.3E8.D10) [NB600-1171] - Analysis of ATP Synthase beta in HeLa cells. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with a ATP Synthase beta monoclonal antibody at a dilution of 1:200 overnight at 4C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. ATP Synthase beta staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown.

Immunocytochemistry/Immunofluorescence: ATPB Antibody (4.3E8.D10) [NB600-1171] - Analysis of ATP Synthase beta in A431 cells. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with a ATP Synthase beta monoclonal antibody at a dilution of 1:200 overnight at 4C, washed with PBS and incubated with a DyLight-488 conjugated secondary antibody. ATP Synthase beta staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown.

Immunoprecipitation: ATPB Antibody (4.3E8.D10) [NB600-1171] - Analysis of ATP Synthase beta was performed on THP-1 cells. Antigen-antibody complexes were formed by incubating 500ug of THP-1 whole cell lysate (in 500ul volume) with 5ul of an ATP Synthase beta monoclonal antibody overnight at 4C. The immune complexes were captured on 30ul of protein G agarose, washed extensively, and eluted with 6X Laemmli non-reducing sample buffer. Samples were resolved on an 8% SDS-PAGE gel, transferred to a PVDF membrane, and blocked with 5% milk in TBST for 1 hour at room temperature. The membrane was probed with an ATP Synthase beta monoclonal antibody at a dilution of 1:1000 overnight at 4C, washed in TBST, and probed with an HRP-conjugated goat anti-mouse IgG secondary at a dilution of 1:40,000 for 1 hour at room temperature. Chemiluminescent detection was performed using ECL substrate. Data courtesy of the Innovators Program.

Publications
Kong HK, Wong MH, Chan HM, Lo SC. Chronic Exposure of Adult Rats to Low Doses of Methylmercury Induced a State of Metabolic Deficit in the Somatosensory Cortex. J Proteome Res. 2013 Aug 28 [PMID: 23984759] (WB, Rat)

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 100% guarantee, please visit www.novusbio.com/guarantee

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