DYNC1H1 Polyclonal ANTIBODY

Catalog Number: 12345-1-AP

### Basic Information
- **Catalog Number:** 12345-1-AP
- **Size:** 30 μg/150 μl
- **Source:** Rabbit
- **Isotype:** IgG
- **Purification Method:** Antigen affinity purification
- **Immunogen Catalog Number:** AG2999
- **GenBank Accession Number:** BC021297
- **Gene ID (NCBI):** 1778
- **Full Name:** dynein, cytoplasmic 1, heavy chain 1
- **Calculated MW:** 4646aa, 532 kDa
- **Observed MW:** 532 kDa

### Applications
- **Tested Applications:** IF, IHC, WB, ELISA
- **Cited Applications:** IF, IHC, WB
- **Species Specificity:** human, rat, zebrafish, mouse
- **Cited Species:** human, mouse, zebrafish

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

### Background Information
Dyneins are a group of microtubule-activated ATPases that serve to convert chemical energy into mechanical energy. It can be divided into 2 large subgroups, namely, the axonemal and cytoplasmic dyneins. The conventional cytoplasmic dynein are comprised of 2 heavy chain polypeptides and a number of intermediate and light chains. DYNC1H1 is a cytoplasmic dynein and belongs to the dynein heavy chain family. It acts as a motor for the intracellular retrograde motility of vesicles and organelles along microtubules. DYNC1H1 has been implicated in the degeneration of dopaminergic neuron axons and motor neurons in PD patients.

### Notable Publications

<table>
<thead>
<tr>
<th>Author</th>
<th>PubMed ID</th>
<th>Journal</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xiang Zhang</td>
<td>28924223</td>
<td>Sci Rep</td>
<td>IF</td>
</tr>
<tr>
<td>Jie Liang</td>
<td>31488726</td>
<td>Aging (Albany NY)</td>
<td>WB</td>
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<td>Courtney M Schoeder</td>
<td>26272277</td>
<td>Elife</td>
<td>WB</td>
</tr>
</tbody>
</table>

### Storage
- **Storage:** Store at -20°C. Stable for one year after shipment.
- **Storage Buffers:** PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
- **Aliquoting is unnecessary for -20°C storage**

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HeLa cells were subjected to SDS PAGE followed by western blot with DYNC1H1 antibody at dilution of 1:500 incubated at room temperature for 1.5 hours.

Immunofluorescent analysis of MCF-7 cells, using DYNC1H1 antibody 12345-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).

Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 12345-1-AP (DYNC1H1 antibody) at dilution of 1:200 (under 10x lens) heat mediated antigen retrieved with Tris-EDTA buffer.

Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 12345-1-AP (DYNC1H1 antibody) at dilution of 1:200 (under 40x lens) heat mediated antigen retrieved with Tris-EDTA buffer.