Basic Information

**Catalog Number:** 12323-1-AP  
**Size:** mg/ml  
**Source:** Rabbit  
**Isotype:** IgG  
**Purification Method:** Antigen affinity purification  
**Immunogen Catalog Number:** AG2984  
**GenBank Accession Number:** BC011953  
**GeneID (NCBI):** 5080  
**Full Name:** paired box 6  
**Calculated MW:** 46.6 kDa  
**Observed MW:** 47 kDa

Applications

**Tested Applications:** FC, IF, IHC, WB, ELISA  
**Cited Applications:** IF, WB  
**Species Specificity:** human, mouse  
**Cited Species:** human, mouse  
**Positive Controls:**  
**WB:** Y79 cells; human stomach tissue, mouse embryo tissue, rat brain tissue  
**IHC:** mouse brain tissue; mouse embryo tissue  
**IF:** mouse brain tissue; iPS cells

Background Information

PAX6, a paired domain and homeodomain-containing transcription factor. Interaction with TRIM11 leads to ubiquitination of PAX6 and its proteasomal degradation. PAX6 is one of the earliest genes expressed in the eye field and considered a master control gene for retinal and eye development. PAX6 also regulates the development of the olfactory, central nervous systems, pituitary, and pancreas. PAX6 mutations can cause complex ocular disorders such as aniridia and Peter's anomaly.

Notable Publications

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<tr>
<th>Author</th>
<th>Pubmed ID</th>
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<tr>
<td>Sara Cipriani</td>
<td>29722804</td>
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<td>Pascale Saugier-Veber</td>
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<td>Fang Gao</td>
<td>28346005</td>
<td>Stem Cell Reports</td>
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Storage

**Storage:** Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:** PBS, 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.
Immunofluorescent staining of PAX6 (12323-1-AP, 1:250 dilution) with 4% PFA fixed control human induced pluripotent stem cells (hiPSC) derived neuronal precursor cells (NPCs). (Green: PAX6; Blue: DAPI). Provided by BioTalentum Ltd., Hungary.

Various lysates were subjected to SDS PAGE followed by western blot with 12323-1-AP (PAX6 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.

Immunohistochemistry of paraffin-embedded mouse brain tissue slide using 12323-1-AP (PAX6 antibody) at dilution of 1:1000 (under 10x lens) heat mediated antigen retrieved with Tris-EDTA buffer (pH 9).

Immunohistochemistry of paraffin-embedded mouse brain tissue slide using 12323-1-AP (PAX6 antibody) at dilution of 1:1000 (under 40x lens) heat mediated antigen retrieved with Tris-EDTA buffer (pH 9).

Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using 12323-1-AP (PAX6 antibody) at dilution of 1:50 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) 1X10^6 SH-SY5Y cells were stained with 0.2ug PAX6 antibody (12323-1-AP, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.