

Catalog No.: A7334 8 Publications





Basic Information

Observed MW 47kDa

Calculated MW 47kDa

Category **Polyclonal Antibody**

Applications WB, IF/ICC, IP, ELISA

Cross-Reactivity Human, Mouse, Rat

Background

This gene encodes paired box protein Pax-6, one of many human homologs of the Drosophila melanogaster gene prd. In addition to a conserved paired box domain, a hallmark feature of this gene family, the encoded protein also contains a homeobox domain. Both domains are known to bind DNA and function as regulators of gene transcription. Activity of this protein is key in the development of neural tissues, particularly the eye. This gene is regulated by multiple enhancers located up to hundreds of kilobases distant from this locus. Mutations in this gene or in the enhancer regions can cause ocular disorders such as aniridia and Peter's anomaly. Use of alternate promoters and alternative splicing results in multiple transcript variants encoding different isoforms. Interestingly, inclusion of a particular alternate coding exon has been shown to increase the length of the paired box domain and alter its DNA binding specificity. Consequently, isoforms that carry the shorter paired box domain regulate a different set of genes compared to the isoforms carrying the longer paired box domain.

Recommended Dilutions

WB	1:500 - 1:1000
IF/ICC	1:50 - 1:200
IP	0.5µg-4µg antibody for 200µg-600µg extracts of whole cells
ELISA	Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.
Contact	

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Immunogen Information

Gene ID	Swiss Prot
5080	P26367
Immunogen	
	ng a sequence corresponding to amino acids 1-3

Recombinant fusion protein containing a sequence corresponding to amino acids 1-300 of human PAX6 (NP_000271.1).

Svnonvms

AN; AN1; AN2; FVH1; MGDA; WAGR; ASGD5; D11S812E; PAX6

Product Information

Source Rabbit

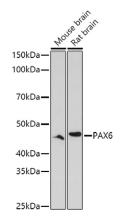
Isotype IgG

Purification Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of various lysates using PAX6 Rabbit pAb (A7334) at 1:1000 dilution.

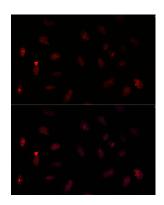
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Enhanced Kit (RM00021).

Exposure time: 180s.



Immunofluorescence analysis of U-2 OS cells using PAX6 Rabbit pAb (A7334) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.