

Anti-PAX6 Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P107448

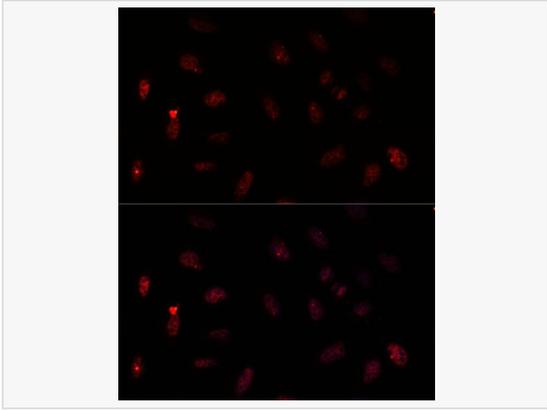
Product Information

Application	WB, IF (Cell)/ICC, IP, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:500~1:1,000; IF 1:50~1:200; IP 0.5µg-4µg antibody for 200µg-600µg extracts of whole cells
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-300 of human PAX6 (NP_000271.1).
Format	Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-PAX6 Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

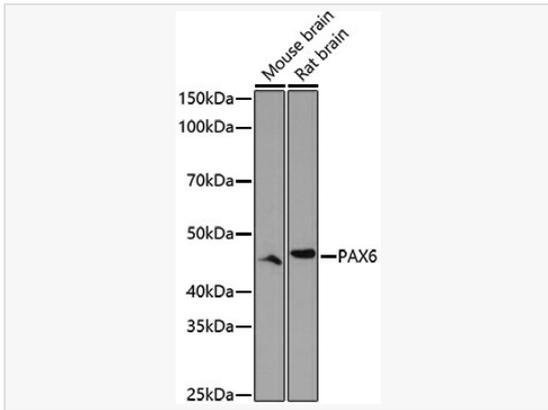
Protein Information

Synonyms	AN; AN1; AN2; FVHI; MGDA; WAGR; ASGD5; D11S812E; PAX6.
Calculated MW	Calculated MW: 47 kDa; Observed MW: 47 kDa
Uniprot ID	P26367
Gene ID	5080
Background	This gene encodes paired box protein Pax-6, one of many human homologs of the <i>Drosophila melanogaster</i> gene <i>prd</i> . 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.

Validation Images



Immunofluorescence analysis of U-2 OS cells using PAX6 Rabbit pAb (P107448) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Western blot analysis of various lysates using PAX6 Rabbit pAb (P107448) at 1:1,000 dilution.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.

Lysates/proteins: 25 μ g per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Enhanced Kit (SQ201).

Exposure time: 180s.