

Product Information

Product SKU:	CAB19099	Gene ID:	5080	Size:	20uL, 100uL
Clone No:	ARC0367	Host Species:	Rabbit	Reactivity:	Human,Mouse,Rat

Additional Information

Observed MW:	47kDa	Conjugate:	Unconjugated
Calculated MW:	47kDa/48kDa	Isotype:	IgG

Immunogen Information

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 Dilution: WB:1:500 - 1:1000 IHC-P:1:50 - 1:200

Synonyms: AN; PAX6

Purification Method: Affinity purification

Immunogen: A synthetic peptide corresponding to a sequence within amino acids 323-422 of human PAX6 (NP_000271.1).

Storage: Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH 7.3.