

Product datasheet for **AM06472SU-N**

PAX6 Mouse Monoclonal Antibody [Clone ID: 1C8]

Product data:

Product Type:	Primary Antibodies
Clone Name:	1C8
Applications:	ELISA, FC, WB
Recommended Dilution:	Western Blot: 1/500 - 1/2000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified recombinant fragment of human PAX6 expressed in E. Coli.
Specificity:	This antibody reacts to PAX6.
Formulation:	State: Ascites State: Ascitic fluid containing 0.03% sodium azide.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	46 kDa
Gene Name:	paired box 6
Database Link:	Entrez Gene 5080 Human P26367



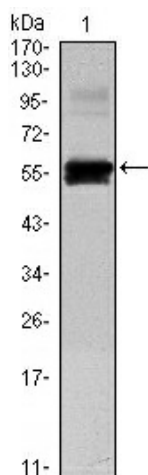
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Background:

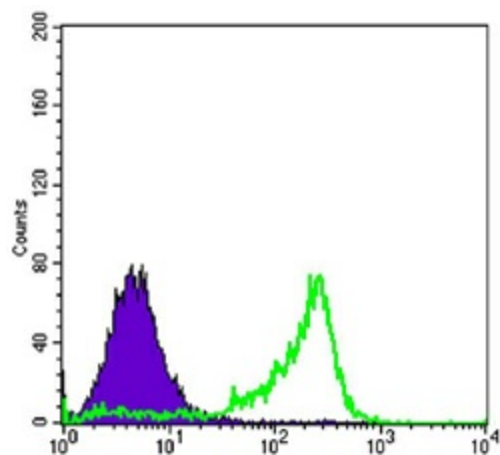
Transcription factor with important functions in the development of the eye, nose, central nervous system and pancreas. Required for the differentiation of pancreatic islet alpha cells .PAX6 is the most researched of the PAX genes and appears throughout the literature as a "master control" gene for the development of eyes and other sensory organs, certain neural and epidermal tissues as well as other homologous structures, usually derived from ectodermal tissues. This transcription factor is most famous for its use in the interspecifically induced expression of ectopic eyes and is of medical importance because heterozygous mutants produce a wide spectrum of ocular defects such as Aniridia in humans. This gene encodes paired box gene 6, one of many human homologues of the *Drosophila melanogaster* gene *prd*. In addition to the hallmark feature of this gene family, a conserved paired box domain, the encoded protein also contains a homeo box domain. Both domains are known to bind DNA, and function as regulators of gene transcription. This gene is expressed in the developing nervous system, and in developing eyes. Mutations in this gene are known to cause aniridia as well as Peter's anomaly, both ocular diseases.

Synonyms:

Pax-6, Aniridia type II protein, AN2, Oculorhombin

Product images:

Western blot analysis using PAX6 mAb against human PAX6 (AA: 1-223) recombinant protein. (Expected MW is 50 kDa)



Flow cytometric analysis of 3T3-L1 cells using PAX6 mouse mAb (green) and negative control (purple).