

PAX6 (Stem Cell Marker) Antibody - With BSA and Azide
Mouse Monoclonal Antibody [Clone SPM612]
Catalog # AH12036

Specification

PAX6 (Stem Cell Marker) Antibody - With BSA and Azide - Product Information

Application	,2,3,4,
Primary Accession	P26367
Other Accession	5080 , 611376
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Calculated MW	47kDa KDa

PAX6 (Stem Cell Marker) Antibody - With BSA and Azide - Additional Information

Gene ID 5080

Other Names

Paired box protein Pax-6, Aniridia type II protein, Oculorhombin, PAX6, AN2

Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

Precautions

PAX6 (Stem Cell Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

PAX6 (Stem Cell Marker) Antibody - With BSA and Azide - Protein Information

Name PAX6

Synonyms AN2

Function

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 (By similarity). Competes with PAX4 in binding to a common element in the glucagon, insulin and somatostatin promoters. Regulates specification of the ventral neuron subtypes by establishing the correct progenitor domains (By similarity). Acts as a transcriptional repressor of NFATC1- mediated gene expression (By similarity).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:P63015}. [Isoform 5a]: Nucleus {ECO:0000250|UniProtKB:P63016}

Tissue Location

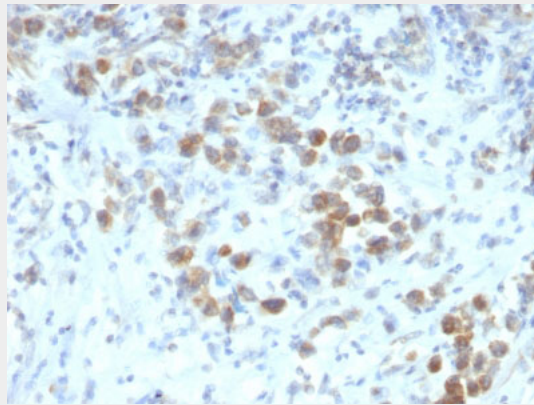
[Isoform 1]: Expressed in lymphoblasts.

PAX6 (Stem Cell Marker) Antibody - With BSA and Azide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PAX6 (Stem Cell Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Gastric Carcinoma stained with PAX6 Monoclonal Antibody (SPM612).

PAX6 (Stem Cell Marker) Antibody - With BSA and Azide - Background

Pax genes contain paired domains with strong homology to genes in *Drosophila*, which are involved in programming early development. Lesions in the Pax-6 gene account for most cases of aniridia, a congenital malformation of the eye, chiefly characterized by iris hypoplasia, which can cause blindness. Pax-6 is involved in other anterior segment malformations besides aniridia, such as Peters anomaly, a major error in the embryonic development of the eye with corneal clouding with variable iridolenticulocorneal adhesions. The Pax-6 gene encodes a transcriptional regulator that recognizes target genes through its paired-type DNA-binding domain. The paired domain is composed of two distinct DNA-binding subdomains, the amino-terminal subdomain and the carboxy-terminal subdomain, which bind respective consensus DNA sequences. The human Pax-6 gene produces two alternatively spliced isoforms that have the distinct structure of the paired domain.