

## PAX6 (Stem Cell Marker) Antibody

Mouse Monoclonal Antibody [Clone MSVA-706M]

| Catalog No    | Format                         | Size   |
|---------------|--------------------------------|--------|
| 5080-MSM38-P0 | Purified Ab with BSA and Azide | 20 ug  |
| 5080-MSM38-P1 | Purified Ab with BSA and Azide | 100 ug |

| Applications               | Tested Dillution | Note                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Immunohistochemistry (IHC) | 1:100-1:200      | Manual Protocol: Freshly cut sections should be used (less than 10 days between cutting and staining). Heat-induced antigen retrieval for 5 minutes in an autoclave at 121°C in pH 7.8 Target Retrieval Solution buffer. Apply the antibody at a dilution of 1:100 at 37°C for 60 minutes. Visualization of bound antibody by the EnVision Kit (Dako, Agilent) according to the manufacturer's directions. |

### Product Details

|                        |                                                                                         |
|------------------------|-----------------------------------------------------------------------------------------|
| Clone                  | MSVA-706M                                                                               |
| Immunogen              | Recombinant fragment (N-terminus; aa 1-300) of human PAX6 protein                       |
| Host                   | Mouse                                                                                   |
| Clonality              | Monoclonal                                                                              |
| Isotype / Light Chain  | IgG1 / Kappa                                                                            |
| Mol. Weight of Antigen | 47kDa                                                                                   |
| Cellular Localization  | Nucleus                                                                                 |
| Species Reactivity     | Human                                                                                   |
| Positive Control       | Pancreas: A strong PAX6 positivity should be seen in the cells of islets of Langerhans. |

*\*Optimal dilution for a specific application should be determined.*

### Product Images for PAX6 (Stem Cell Marker) Antibody



Paired box protein Pax-6 Mouse Monoclonal Antibody (MSVA-706M) tested on many normal and cancer tissues. The immunohistochemistry staining in these tissues aligns with the expression data in Human Protein Atlas.

### Specificity & Comments

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.

---

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

---

### Supplied As

Ab produced in CHO cell mammalian-based expression system. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide.

---

### Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

---

### Research Areas

Developmental Biology, Neural Stem Cells, Nuclear Marker, Stem Cell Differentiation

---