

Mouse Anti-PAX6 [SPM612]: MC0983, MC0983RTU7

Intended Use: For Research Use Only

Description: 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.

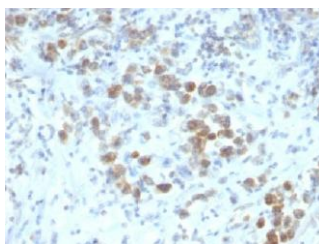
Specifications:

Clone: SPM612
 Source: Mouse
 Isotype: IgG1k
 Reactivity: Human
 Localization: Nucleus
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, Flow Cyt., IF
 Package:

Description	Catalog No.	Size
PAX6 Concentrated	MC0983	1 ml
PAX6 Prediluted	MC0983RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Pancreas, cerebellum, stomach
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human gastric carcinoma tissue stained with anti-PAX6 using DAB.

References:

1. PAX6 expression may be protective against dopaminergic cell loss in Parkinson's disease. Thomas MG, et al. CNS Neurol Disord Drug Targets. 15(1):73-9, 2016.
2. Engineering Human Stem Cell Lines with Inducible Gene Knockout using CRISPR/Cas9. Chen Y, et al. Cell Stem Cell. Aug 6;17(2):233-44, 2015.
3. Sox2 and Pax6 maintain the proliferative and developmental potential of gliogenic neural stem cells In vitro. Gómez-López S, et al. Glia. Nov;59(11):1588-99, 2011.

Doc. 100-MC0983
Rev. A