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Product Information

Monoclonal Anti-Pax 6

Clone PAX6

Purified Mouse Immunoglobulin
IgG Fraction of Antiserum

Product Number **P6373**

Product Description

Monoclonal Anti-Pax6 was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, *E. coli*-derived, recombinant chicken paired box gene 6 protein, rchPax6, amino acids 1-223.¹ The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

Monoclonal Anti-Pax6 was shown to react with mouse, rat and chicken Pax6. The antibody recognizes Pax6 in rat cortical stem cells by immunohistochemistry.

Pax6 is a highly conserved transcription factor essential for the development of a variety of tissues including the eyes, central nervous system and endocrine glands of vertebrates and invertebrates.² It appears to be involved in the regulation of such processes as cell proliferation, migration, adhesion and signaling, not only in normal development, but in oncogenesis as well.^{2,3}

Reagent

The antibody is supplied lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Reconstitute with sterile PBS. If 1 mL of PBS is used, the antibody concentration will be 100 µg/mL.

Storage/Stability

Lyophilized powder can be stored intact at room temperature for several weeks. For extended storage, it should be stored at -20 °C or below. The reconstituted solution can be stored at 2-8 °C for up to 2 weeks. For longer storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

The recommended working dilution is 10 µg/ml for immunohistochemistry.

Note: In order to obtain best results and assay sensitivities of different techniques and preparations, determination of optimal working dilutions by titration test is recommended.

References

1. Ericson, J., et al., Pax6 controls progenitor cell identity and neuronal fate in response to graded Shh signaling, *Cell*, **90**, 169-180 (1997).
2. Simpson, T.I. and D.J. Price, Pax6; a pleiotropic player in development, *Bioessays* **24**, 1041-1051 (2002).
3. Zhou, Y.H., et al., PAX6 suppresses growth of human glioblastoma cells, *J. Neurooncol.*, **71**, 223-229 (2005).

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