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Product Information

Monoclonal Anti-PAX9, Clone PAX9 7C2
produced in rat, purified immunoglobulin

Product Number **SAB4200083**

Product Description

Monoclonal Anti-PAX9 (rat IgG1 isotype) is derived from the hybridoma PAX9 7C2 produced by the fusion of mouse myeloma cells (P3X63Ag8.653) and splenocytes from rat immunized with a recombinant fragment corresponding to a fragment of mouse PAX9 (GeneID: 18511) coupled to MBP.[1] The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-PAX9 recognizes human and mouse PAX9. The product may be used in several immunochemical techniques including immunoblotting (~36 kDa) and immunohistochemistry.[1-3]

The *PAX* gene family encodes a group of transcription factors containing a 128-aa paired DNA-binding domain, and in some cases, a paired-type homeodomain.[4] In mammals, nine *PAX* genes (*PAX1-PAX9*) have been identified, all holding essential developmental roles in a variety of multicellular organisms.[5] *PAX9* gene is highly homologous to *Pax1* and is present in all vertebrates analyzed so far, including zebrafish, chick, mouse, and man.[6-8]

The complex expression pattern of *Pax9* during embryogenesis suggests that it plays a role in the formation of various organs and skeletal elements.[9] Mutations in either the *PAX1* or the *PAX9* genes may produce an inherited skeletal disorder such as the Jarcho-Levin syndrome.[3] Interestingly, progressive loss of PAX9 expression was correlated with increasing malignancy of dysplastic and cancerous epithelium of human oesophagus and lung cancer.[10]

Reagent

Supplied as a solution in 0.01M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~1.0 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at –20 °C. For continuous use, the product may be stored at 2–8 °C for up to one month. For extended storage, freeze in working aliquots at –20 °C. Repeated freezing and thawing, or 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

Immunoblotting: a working antibody concentration of 0.25-0.5 μg/mL is recommended using H1299 cell extracts.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine optimal working dilutions by titration.

References

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VS,GG,TD,KAA,PHC,MAM 05/19-1