Biotinylated
Anti-mouse, rat, chicken Pax6 Antibody

ORDERING INFORMATION

Catalog Number: BAM1260

Clone: PAX6

Lot Number: HOL01

Size: 100 μg

Formulation: 0.2 μm filtered solution in PBS with BSA

Storage: -20° C

Specificity: chicken, mouse, and rat Pax6

Immunogen: chicken Pax6

Ig class: mouse IgG_1

Application: Immunohistochemistry

Preparation
This antibody 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) (aa 1 - 223).[1] The IgG fraction of tissue culture supernatant was purified by Protein G affinity chromatography and then biotinylated. Pax6 is a highly conserved transcription factor essential for the development of tissues including the eyes, central nervous system and endocrine glands of vertebrates and invertebrates.[2-5] It is a key regulator that is required for normal islet development.

Formulation
Each vial contains 100 μg antibody in 71.9 μL of a 0.2 μm filtered solution in phosphate-buffered saline (PBS) containing 50 μg of bovine serum albumin (BSA) per 1 μg of antibody.

Endotoxin Level
< 0.1 EU per 1 μg of the antibody as determined by the LAL method.

Storage
The antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

Specificity
This antibody was shown to react with mouse, rat and chicken Pax6.

Application
Immunohistochemistry - This antibody can be used with the appropriate secondary reagents at a concentration of 10 μg/mL in fixed cells or tissue sections. Cells were fixed with 4% paraformaldehyde and 0.15% picric acid in PBS at room temperature for 20 min., then permeabilized and blocked with 0.1% triton X-100 and 10% normal donkey serum in PBS, 1% BSA at room temperature for 45 min. After blocking, cells were incubated with diluted primary antibody overnight at 4° C and then with Rodamine Red coupled streptavidin at room temperature in the dark for an hour. Between each step, cells were washed with PBS and 0.1% BSA. Immunohistochemical localization of Pax6 on tissue sections can be carried out using this antibody as described.[1, 6, 7]

Optimal dilutions should be determined by each laboratory for each application.

References

1. Ericson, J. *et al*., 1997, Cell **90**:169 - 180.
2. Kumar, J.P., 2001, Nat. Rev. Genet. **2**(11):846 - 857.
3. Simpson, T.I. and D.J. Price, 2002, Bioessays **24**(11):1041 - 1051.
4. Schuurmans, C. and F. Guillemot, 2002, Curr. Opin. Neurobiol. **12**(1):26 - 34.
5. Dohrman, C. *et al*., 2000, Mech. Dev. **92**(1):47 - 54.
6. Ericson, J. *et al*., 1992, Science **256**:1555 - 1560.
7. Zhang, X.-M. *et al*., 2001, Dev. Biol. **233**:271 - 290.

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