Anti-human Olig3 Antibody

ORDERING INFORMATION

Catalog Number: AF2356

Lot Number: UFO01

Size: 100 μg

Formulation: 0.2 μm filtered solution in PBS with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human Olig3

Immunogen: *E. coli*-derived rhOlig3

Ig Type: goat IgG

Applications: Direct ELISA
Western blot
Immunocytochemistry

Preparation

Produced in goats immunized with purified, *E coli*-derived, recombinant human Oligodendrocyte Transcription Factor 3 (rhOlig3). Human Olig3 specific IgG was purified by human Olig3 affinity chromatography. The Olig family is a sub-family of the basic helix-loop-helix transcription factors. Olig1 and Olig2, which have been implicated in oligodendrogenesis, are expressed in the region of the ventral ventricular zone of late embryonic spinal cord where oligodendrocyte progenitors appear. Olig3 is transiently expressed in different types of progenitors of embryonic central nervous system and then disappears in the course of development. In adult, expression of Olig3 is primarily detected in non-neural tissues.

Formulation

Lyophilized from a 0.2 μm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted 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 has been selected for its ability to recognize human Olig3 in direct ELISAs and western blots.

Applications

Direct ELISA - This antibody can be used at 0.5 - 1.0 μg/mL with the appropriate secondary reagents to detect human Olig3. The detection limit for rhOlig3 is approximately 0.2 ng/well.

Western blot - This antibody can be used at 0.1 - 0.2 μg/mL with the appropriate secondary reagents to detect human Olig3. The detection limit for rhOlig3 is approximately 1 ng/lane and 5 ng/lane under non-reducing and reducing conditions, respectively. In this format, this antibody shows less than 2% cross-reactivity with rhOlig-1 and rhOlig-2.

Immunocytochemistry - This antibody can be used at a concentration of 10 μg/mL to detect human Olig3 in mouse E11 embryonic spinal cord sections. Sections were fixed with PBS containing 4% paraformaldehyde for 20 minutes at room temperature and blocked with PBS containing 10% normal donkey serum, 0.1% Triton X-100 and 1% BSA for 45 minutes at room temperature. After blocking, cells were incubated with diluted primary antibody overnight at 4° C followed by Rhodamine Red-coupled anti-goat IgG at room temperature in the dark for one hour. Between each step, cells were washed with PBS containing 0.1% BSA.

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

R&D Systems, Inc.
1-800-343-7475

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