

## Monoclonal Antibody to PROX-1 - Aff - Purified

<b>Alternate names:</b>	Homeobox prospero-like protein PROX1, PROX1, Prospero homeobox protein 1
<b>Catalog No.:</b>	AM08261PU-N
<b>Quantity:</b>	0.1 ml
<b>Background:</b>	Prox1 (Prospero-related homeobox 1) is a divergent homeogene that regulates cell proliferation, fate determination and differentiation during vertebrate embryonic development. The protein is expressed in the developing lens and is also detected in embryonic brain, lung, liver and kidney; while in adult it is more abundant in heart and liver than in brain, skeletal muscle, kidney and pancreas (Chen et al., 2006). Prox1 is thought to play a fundamental role in early development of the CNS and may regulate gene expression and development of postmitotic undifferentiated young neurons (Misra et al., 2008)
<b>Uniprot ID:</b>	<a href="#">Q92786</a>
<b>NCBI:</b>	<a href="#">NP_002754.2</a>
<b>GeneID:</b>	<a href="#">5629</a>
<b>Host / Isotype:</b>	Mouse / IgG
<b>Clone:</b>	5G10
<b>Immunogen:</b>	Recombinant Human Prox1 protein.
<b>Format:</b>	<b>State:</b> Liquid purified culture supernatant. <b>Purification:</b> Protein G Chromatography. <b>Buffer System:</b> 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% Glycerol.
<b>Applications:</b>	<b>Immunohistochemistry:</b> 1/1000. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody is specific for Prox1.
<b>Species Reactivity:</b>	<b>Tested:</b> Human, Chicken, Mouse and Rat
<b>Storage:</b>	Store the antibody undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
<b>General Readings:</b>	1. Chen X, Patel TP, Cain WJ, Duncan MK. Production of monoclonal antibodies against Prox1. Hybridoma (Larchmt). 2006 Feb;25(1):27-33. PubMed PMID: 16475879. 2. Misra K, Gui H, Matise MP (2008) Prox1 regulates a transitory state for interneuron neurogenesis in the spinal cord. Dev Dyn 237(2):393-402.

**Pictures:**

**Figure 1.** Immunohistochemical staining of rat dentate gyrus showing specific immunolabeling of the prox1 protein. Photo courtesy of Justin Kievits and Teresa Milner, Weill Cornell Medical College.

