10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Eya1 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI10361

Product Information

Application	WB
Primary Accession	P97767
Other Accession	NM_010164, NP_034294
Reactivity	Human, Mouse, Rat, Zebrafish, Pig, Dog, Bovine
Predicted	Human, Mouse, Rat, Zebrafish, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64324

Additional Information

Gene ID	14048
Alias Symbol	bor
Other Names	Eyes absent homolog 1, 3.1.3.16, 3.1.3.48, Eya1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Eya1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Eya1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Eya1
Function	Functions both as protein phosphatase and as transcriptional coactivator for SIX1, and probably also for SIX2, SIX4 and SIX5 (PubMed:10490620). Tyrosine phosphatase that dephosphorylates 'Tyr-142' of histone H2AX (H2AXY142ph) and promotes efficient DNA repair via the recruitment of DNA repair complexes containing MDC1. 'Tyr-142' phosphorylation of histone H2AX plays a central role in DNA repair and acts as a mark that distinguishes between apoptotic and repair responses to genotoxic stress (PubMed:19234442). Its function as histone phosphatase may contribute to its function in transcription regulation during organogenesis (PubMed:14628042). Also has phosphatase activity with proteins phosphorylated on Ser and Thr residues (in vitro). Required for normal embryonic development of the craniofacial and

	trunk skeleton, kidneys and ears (PubMed:10471511). Together with SIX1, it plays an important role in hypaxial muscle development; in this it is functionally redundant with EYA2 (PubMed:17098221).
Cellular Location	Cytoplasm. Nucleus Note=Localizes at sites of DNA damage at double-strand breaks (DSBs) {ECO:0000250|UniProtKB:Q99502}
Tissue Location	Extensively expressed in cranial placodes, branchial arches, CNS and developing eye and nose

Images