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EYA1 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12446a

Specification

EYA1 Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	Q99502
Other Accession	P97767, NP_000494.2, NP_742057.1, NP_742055.1
Reactivity	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**64593**
Antigen Region	**1-30**

EYA1 Antibody (N-term) - Additional Information

Gene ID 2138

Other Names
Eyes absent homolog 1, EYA1

Target/Specificity
This EYA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human EYA1.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
EYA1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

EYA1 Antibody (N-term) - Protein Information

Name EYA1

Function Functions both as protein phosphatase and as transcriptional coactivator for SIX1, and

probably also for SIX2, SIX4 and SIX5 (By similarity). 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 (By similarity). Has also phosphatase activity with proteins phosphorylated on Ser and Thr residues (in vitro) (By similarity). Required for normal embryonic development of the craniofacial and trunk skeleton, kidneys and ears (By similarity). Together with SIX1, it plays an important role in hypaxial muscle development; in this it is functionally redundant with EYA2 (By similarity).

Cellular Location
Cytoplasm. Nucleus Note=Localizes at sites of DNA damage at double-strand breaks (DSBs)

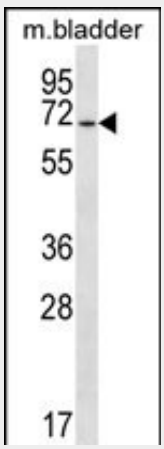
Tissue Location
In the embryo, highly expressed in kidney with lower levels in brain. Weakly expressed in lung. In the adult, highly expressed in heart and skeletal muscle. Weakly expressed in brain and liver. No expression in eye or kidney

EYA1 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

EYA1 Antibody (N-term) - Images



EYA1 Antibody (N-term) (Cat. #AP12446a) western blot analysis in mouse bladder tissue lysates (35ug/lane).This demonstrates the EYA1 antibody detected the EYA1 protein (arrow).

EYA1 Antibody (N-term) - Background

This gene encodes a member of the eyes absent (EYA) family

of proteins. The encoded protein may play a role in the developing kidney, branchial arches, eye, and ear. Mutations of this gene have been associated with branchiootorenal dysplasia syndrome, branchiootic syndrome, and sporadic cases of congenital cataracts and ocular anterior segment anomalies. A similar protein in mice can act as a transcriptional activator. Four transcript variants encoding three distinct isoforms have been identified for this gene.

EYA1 Antibody (N-term) - References

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Patrick, A.N., et al. J. Biol. Chem. 284(31):20781-20790(2009)
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