

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

**Specification**

**EYA1 Antibody (N-term) - Product Information**

Application	<b>WB,E</b>
Primary Accession	<a href="#">Q99502</a>
Other Accession	<a href="#">P97767</a> , <a href="#">NP_000494.2</a> , <a href="#">NP_742057.1</a> , <a href="#">NP_742055.1</a>
Reactivity	<b>Mouse</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit Ig</b>
Calculated MW	<b>64593</b>
Antigen Region	<b>1-30</b>

**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**

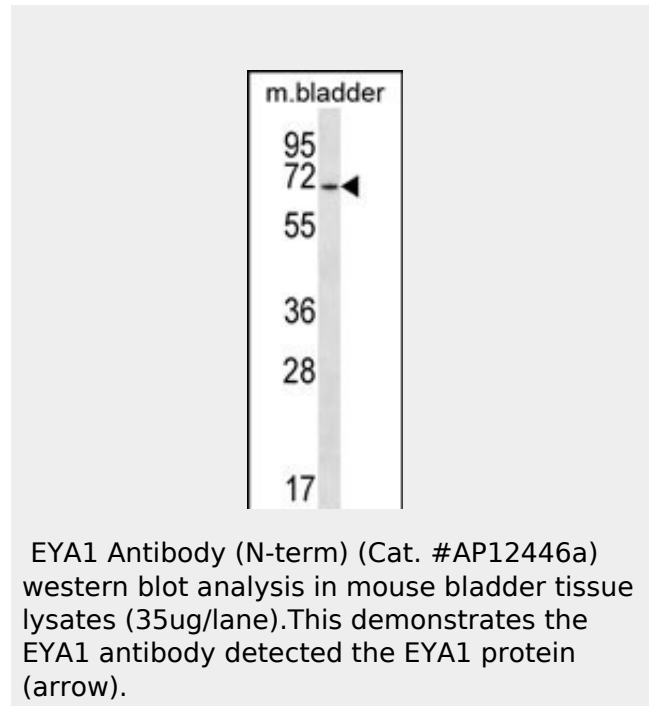
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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



**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**

Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :  
Lin, L., et al. Zhonghua Zheng Xing Wai Ke Za

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:<a href="http://www.uniprot.org/citations/19234442" target="\_blank">19234442</a>). 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

Zhi 25(6):436-439(2009)

Drake, K.M., et al. Clin. Cancer Res. 15(19):5985-5992(2009)

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

Lee, J.D., et al. Ann. Clin. Lab. Sci. 39(3):303-306(2009)

#### **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 Cytometry](#)
- [Cell Culture](#)