

**EYA1 antibody - middle region**  
**Rabbit Polyclonal Antibody**  
**Catalog # AI10060****Specification**

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**EYA1 antibody - middle region - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">Q99502</a>
Other Accession	<a href="#">Q99502</a> , <a href="#">NP_742057</a> , <a href="#">NM_172060</a>
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Chicken, Dog, Guinea Pig, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61 kDa KDa

**EYA1 antibody - middle region - Additional Information****Gene ID 2138**

Alias Symbol	BOP, BOR, MGC141875
<b>Other Names</b>	
Eyes absent homolog 1, EYA1	

**Target/Specificity**

EYA1 is a member of the eyes absent (EYA) family of proteins. EYA1 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. 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.

**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.

**EYA1 antibody - middle region - 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](http://www.uniprot.org/citations/19234442)). Its function as histone phosphatase may contribute to its function in transcription regulation during organogenesis (By similarity). Also has 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)

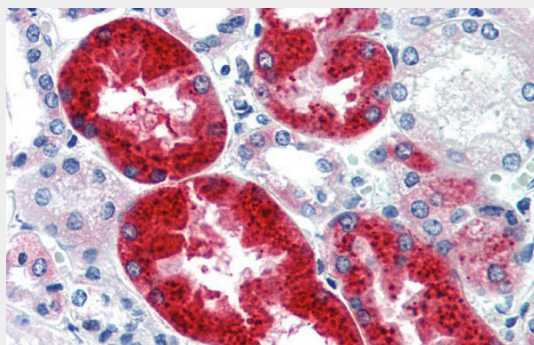
**Tissue Location**

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 - middle region - 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](#)

**EYA1 antibody - middle region - Images**

EYA1 antibody - middle region (AI10060) in Human kidney cells using Immunohistochemistry  
Immunohistochemistry with Human kidney lysate tissue at an antibody concentration of 5.0µg/ml using anti-EYA1 antibody (AI10060)



EYA1 antibody - middle region (AI10060) in Human brain cells using Western Blot  
WB Suggested Anti-EYA1 Antibody Titration: 0.2-1  $\mu$ g/ml  
ELISA Titer: 1:312500  
Positive Control: Human brain

#### **EYA1 antibody - middle region - Background**

This is a rabbit polyclonal antibody against EYA1. It was validated on Western Blot using a cell lysate as a positive control. Abgent strives to provide antibodies covering each member of a whole protein family of your interest. We also use our best efforts to provide you antibodies recognize various epitopes of a target protein. For availability of antibody needed for your experiment, please inquire ([sales@abgent.com](mailto:sales@abgent.com)).