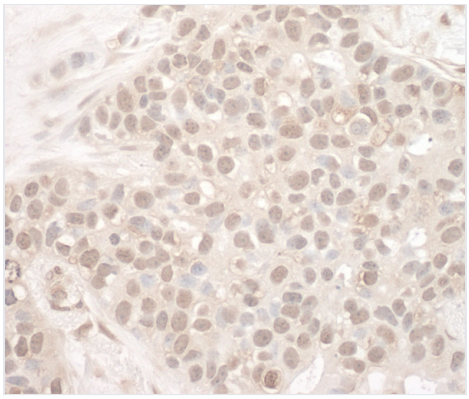
# EYA2 Antibody – Rabbit Polyclonal

## PRODUCT OVERVIEW

| | |
|---|---|
| **Product Name** | EYA2, Polyclonal Antibody |
| **Full Product Name** | Rabbit anti-EYA2 IHC Antibody, Affinity Purified |
| **Product Gene Name** | anti-EYA2 antibody |
| **Product Synonym Names** | eyes absent homolog 2; EAB1; Eyes absent homolog 2; EYA transcriptional coactivator and phosphatase 2 |
| **Clonality** | Polyclonal |
| **Host** | Rabbit |
| **Species Reactivity** | Human |
| **Form/Format** | Liquid. Whole IgG. Tris-buffered Saline containing 0.1% BSA and 0.09% Sodium Azide |
| **Purity/Purification** | Antigen Affinity Purified |
| **Concentration** | 50ug/ml (lot specific) |
| **Preparation and Storage** | Store at 2-8 degree C<br>Shelf Life: 1 year from date of receipt |
| **Molecular Weight** | 50,533 Da |
| **OMIM** | 601654 |
| **3D Structure** | ModBase 3D Structure for O00167 |
| **Predicted Reactivity** | Bovine, Horse, Orangutan, Monkey, Gorilla, Chimpanzee, White-tufted-ear marmoset, Gray short-tailed opossum, Tasmanian devil, Little brown bat, Northern white-cheeked gibbon, Crab-eating macaque, Small-eared galago |
| **Immunogen** | Between 100 and 150 |
| **Conjugation** | Unconjugated |
| **Product Categories/Family for anti-EYA2 antibody** | Primary Antibodies |
| **Applications Tested/Suitable for anti-EYA2 antibody** | Immunohistochemistry (IHC) |
| **Application Notes for anti-EYA2 antibody** | IHC: 1:100-1:500 |
| **Related Product Information for anti-EYA2 antibody** | EYA2 (eyes absent homolog 2) functions as a tyrosine phosphatase that specifically dephosphorylates 'Tyr-142' of histone H2AX. EYA2 promotes efficient DNA repair by dephosphorylating H2AX and promoting the recruitment of DNA repair complexes containing MDC1. EYA2 coactivates SIX1. Together with SIX1 and DACH2 EYA2 seems to be involved in myogenesis. EYA2 may be involved in development of the eye [taken from the Universal Protein Resource (UniProt) www.uniprot.org/uniprot/O00167]. |
| **Other Notes** | Small volumes of anti-EYA2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply. |
| **Searchable Terms for EYA2 purchase** | MBS3907990 is an antibody targeting EYA2. Also known as Rabbit anti-EYA2 IHC Antibody, Affinity Purified. Reactive in Human. Host: Rabbit. |



**Immunohistochemistry (IHC) of anti-EYA2 antibody**
Detection of human EYA2 by immunohistochemistry. Sample: FFPE section of human breast carcinoma. Antibody: Affinity purified rabbit anti-EYA2 (Cat. No. MBS3907990) used at a dilution of 1:250 Detection: DAB

## ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for EYA2. It may not necessarily be applicable to this product.

| | |
|---|---|
| **NCBI GI #** | 26667227 |
| **NCBI GeneID** | 2139 |
| **NCBI Accession #** | NP_005235.3 |
| **UniProt Primary Accession #** | O00167 |
| **UniProt Secondary Accession #** | Q5JSW8; Q86U84; Q96CV6; Q96H97; Q99503; Q99812; Q9BWF6; Q9H4S3; Q9H4S9; Q9NPZ4; Q9UIX7 |
| **UniProt Related Accession #** | O00167 |
| **GenBank Nucleotide #** | NM_005244.4 |
| **NCBI Official Full Name** | eyes absent homolog 2 isoform a |
| **NCBI Official Synonym Full Names** | EYA transcriptional coactivator and phosphatase 2 |
| **NCBI Official Symbol** | EYA2 |
| **NCBI Official Synonym Symbols** | EAB1 |
| **UniProt Protein Name** | Eyes absent homolog 2 |
| **Protein Family** | Eyes absent |
| **UniProt Gene Name** | EYA2 |
| **UniProt Synonym Gene Names** | EAB1 |
| **UniProt Entry Name** | EYA2_HUMAN |
| **NCBI Protein Information** | eyes absent homolog 2 |
| **NCBI Summary for EYA2** | This gene encodes a member of the eyes absent (EYA) family of proteins. The encoded protein may be post-translationally modified and may play a role in eye development. A similar protein in mice can act as a transcriptional activator. Alternative splicing results in multiple transcript variants, but the full-length natures of all of these variants have not yet been determined. [provided by RefSeq, Jul 2009] |

| | |
|---|---|
| **UniProt Comments for EYA2** | EYA2: Tyrosine phosphatase that specifically dephosphorylates 'Tyr-142' of histone H2AX (H2AXY142ph). '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. Promotes efficient DNA repair by dephosphorylating H2AX, promoting the recruitment of DNA repair complexes containing MDC1. Its function as histone phosphatase probably explains its role in transcription regulation during organogenesis. Coactivates SIX1. Seems to coactivate SIX2, SIX4 and SIX5. Together with SIX1 and DACH2 seem to be involved in myogenesis. May be involved in development of the eye. Interaction with GNAZ and GNAI2 prevents nuclear translocation and transcriptional activity. Belongs to the HAD-like hydrolase superfamily. EYA family. 3 isoforms of the human protein are produced by alternative splicing.<br><br>Protein type: EC 3.1.3.48; Cell development/differentiation; Protein phosphatase, tyrosine (non-receptor); Apoptosis<br><br>Chromosomal Location of Human Ortholog: 20q13.1<br><br>Cellular Component: centrosome; mitochondrion; cytoplasm; nucleus<br><br>Molecular Function: protein binding; magnesium ion binding; protein tyrosine phosphatase activity<br><br>Biological Process: histone dephosphorylation; striated muscle development; regulation of transcription, DNA-dependent; transcription, DNA-dependent; mesodermal cell fate specification; DNA repair |
| **Research Articles on EYA2** | **1.** Decreased expression of EYA2 is associated with pancreatic adenocarcinomas. |
| **Precautions** | All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines. |
| **Disclaimer** | While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice.<br><br>It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information. |
| **Product Note** | Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details. |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures.

**MyBioSource** | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-antibody/eya2/3907990