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EYA2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17094c

Specification

EYA2 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	O00167
Other Accession	NP_742108.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**59232**
Antigen Region	**216-244**

EYA2 Antibody (Center) - Additional Information

Gene ID 2139

Other Names
Eyes absent homolog 2, EYA2, EAB1

Target/Specificity
This EYA2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 216-244 amino acids from the Central region of human EYA2.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

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
EYA2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

EYA2 Antibody (Center) - Protein Information

Name EYA2

Synonyms EAB1

Function Functions both as protein phosphatase and as transcriptional coactivator for SIX1, and probably also for SIX2, SIX4 and SIX5 (PubMed:12500905, PubMed:23435380). 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:19351884). Its function as histone phosphatase may contribute to its function in transcription regulation during organogenesis. Plays an important role in hypaxial muscle development together with SIX1 and DACH2; in this it is functionally redundant with EYA1 (PubMed:12500905).

Cellular Location
Cytoplasm. Nucleus Note=Retained in the cytoplasm via interaction with GNAZ and GNAI2 (PubMed:10906137). Interaction with SIX1, SIX2, SIX4 or SIX5 is required for translocation to the nucleus (PubMed:10906137, PubMed:12500905).

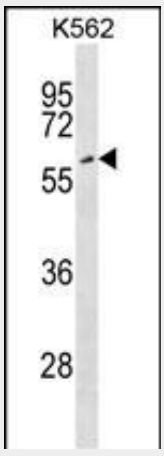
Tissue Location
Highest expression in muscle with lower levels in kidney, placenta, pancreas, brain and heart

EYA2 Antibody (Center) - 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

EYA2 Antibody (Center) - Images



EYA2 Antibody (Center) (Cat. #AP17094c) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the EYA2 antibody detected the EYA2 protein (arrow).

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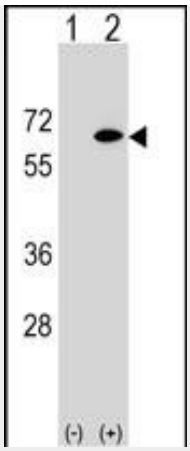

Western blot analysis of EYA2 (arrow) using rabbit polyclonal EYA2 Antibody (Center) (Cat. #AP17094c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the EYA2 gene.

EYA2 Antibody (Center) - Background

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.

EYA2 Antibody (Center) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010)
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Guo, J.T., et al. Zhonghua Zhong Liu Za Zhi 31(7):528-531(2009)