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EYA2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17094c

Product Information

Application	WB, E
Primary Accession	O00167
Other Accession	NP_742108.2
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37025
Calculated MW	59232
Antigen Region	216-244

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.

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

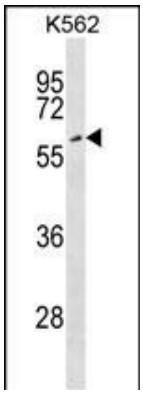
Background

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.

References

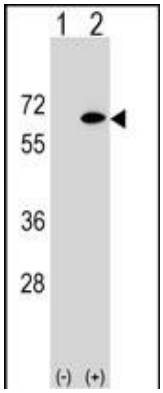
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Joslyn, G., et al. Alcohol. Clin. Exp. Res. 34(5):800-812(2010)
Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)
Guo, J.T., et al. Zhonghua Zhong Liu Za Zhi 31(7):528-531(2009)

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).

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.



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