

# DIAPH1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant DIAPH1. Catalog # AT1764a

## **Product Information**

Application	WB, E
Primary Accession	<u>060610</u>
Other Accession	<u>NM_005219</u>
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b Kappa
Clone Names	5A8
Calculated MW	141347

## **Additional Information**

Gene ID	1729
Other Names	Protein diaphanous homolog 1, Diaphanous-related formin-1, DRF1, DIAPH1, DIAP1
Target/Specificity	DIAPH1 (NP_005210, 921 a.a. ~ 1024 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	DIAPH1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

This gene is a homolog of the Drosophila diaphanous gene, and has been linked to autosomal dominant, fully penetrant, nonsyndromic sensorineural progressive low-frequency hearing loss. Actin polymerization involves proteins known to interact with diaphanous protein in Drosophila and mouse. It has therefore been speculated that this gene may have a role in the regulation of actin polymerization in hair cells of the inner ear. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene.

## References

Flightless-I (Fli-I) regulates the actin assembly activity of diaphanous-related formins (DRFs) Daam1 and

mDia1 in cooperation with active Rho GTPase. Higashi T, et al. J Biol Chem, 2010 May 21. PMID 20223827.Force-induced myofibroblast differentiation through collagen receptors is dependent on mammalian diaphanous (mDia). Chan MW, et al. J Biol Chem, 2010 Mar 19. PMID 20071339.Distinct roles for the actin nucleators Arp2/3 and hDia1 during NK-mediated cytotoxicity. Butler B, et al. Curr Biol, 2009 Dec 1. PMID 19913427.RhoA effector mDia1 is required for PI 3-kinase-dependent actin remodeling and spreading by thrombin in platelets. Gao G, et al. Biochem Biophys Res Commun, 2009 Jul 31. PMID 19470376.Coeliac disease-associated risk variants in TNFAIP3 and REL implicate altered NF-kappaB signalling. Trynka G, et al. Gut, 2009 Aug. PMID 19240061.

#### Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.18 KDa) .

Detection limit for recombinant GST tagged DIAPH1 is approximately 0.1ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.