10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PAK3 Antibody (monoclonal) (M08)

Mouse monoclonal antibody raised against a partial recombinant PAK3.
Catalog # AT3175a

Product Information

Application	WB, IF
Primary Accession	O75914
Other Accession	NM_002578
Reactivity	Human, Mouse
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3A12
Calculated MW	62310

Additional Information

Gene ID	5063
Other Names	Serine/threonine-protein kinase PAK 3, Beta-PAK, Oligophrenin-3, p21-activated kinase 3, PAK-3, PAK3, OPHN3
Target/Specificity	PAK3 (NP_002569, 1 a.a. ~ 90 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200
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	PAK3 Antibody (monoclonal) (M08) is for research use only and not for use in diagnostic or therapeutic procedures.

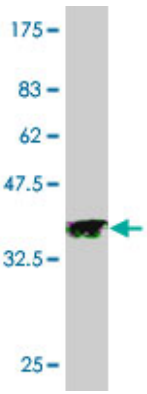
Background

PAK proteins are critical effectors that link Rho GTPases to cytoskeleton reorganization and nuclear signaling. PAK proteins, a family of serine/threonine p21-activating kinases, serve as targets for the small GTP binding proteins Cdc42 and RAC and have been implicated in a wide range of biological activities. The protein encoded by this gene forms an activated complex with GTP-bound RAS-like (P21), CDC2 and RAC1 proteins which then catalyzes a variety of targets. This protein may be necessary for dendritic development and for the rapid cytoskeletal reorganization in dendritic spines associated with synaptic plasticity. Defects in this gene are the cause of non-syndromic mental retardation X-linked type 30 (MRX30), also called X-linked mental retardation type 47 (MRX47). Alternatively spliced transcript variants encoding different isoforms have been identified.

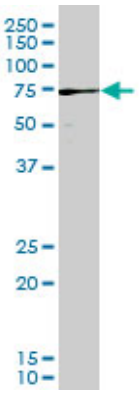
References

Sequence analysis of P21-activated kinase 3 (PAK3) in chronic schizophrenia with cognitive impairment. Morrow EM, et al. Schizophr Res, 2008 Dec. PMID 18805672.A novel splice mutation in PAK3 gene underlying mental retardation with neuropsychiatric features. Rejeb I, et al. Eur J Hum Genet, 2008 Nov. PMID 18523455.Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Kimura K, et al. Genome Res, 2006 Jan. PMID 16344560.Regulation of the interaction of Pak2 with Cdc42 via autophosphorylation of serine 141. Jung JH, et al. J Biol Chem, 2005 Dec 2. PMID 16204230.The DNA sequence of the human X chromosome. Ross MT, et al. Nature, 2005 Mar 17. PMID 15772651.

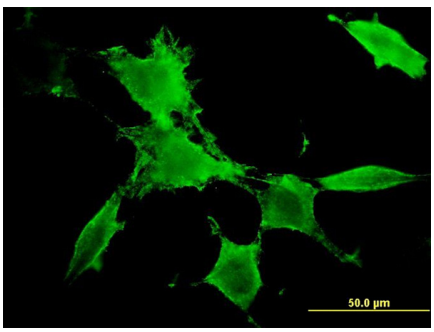
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (35.53 KDa) .



PAK3 monoclonal antibody (M08), clone 3A12 Western Blot analysis of PAK3 expression in NIH/3T3 ((Cat # AT3175a)



Immunofluorescence of monoclonal antibody to PAK3 on NIH/3T3 cell. [antibody concentration 10 ug/ml]

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