

# ARG52388 anti-PARK7 / DJ1 antibody [4H4]

Package: 100 μl, 50 μl Store at: -20°C

# Summary

Product Description	Mouse Monoclonal antibody [4H4] recognizes PARK7 / DJ1
Tested Reactivity	Hu, Bov
Species Does Not React With	Ms, Rat
Tested Application	ICC/IF, WB
Host	Mouse
Clonality	Monoclonal
Clone	4H4
Isotype	lgG1
Target Name	PARK7 / DJ1
Species	Human
Immunogen	Full length recombinant human PARK7 / DJ-1 expressed in and purified from E. coli
Conjugation	Un-conjugated
Alternate Names	DJ1; DJ-1; Oncogene DJ1; EC 3.5.1; Parkinson disease protein 7; HEL-S-67p; EC 3.1.2; Protein deglycase DJ-1

# **Application Instructions**

Application table	Application	Dilution
	ICC/IF	1:5000
	WB	1:2000 - 1:5000
Application Note	Specific for the ~21k park7 protein. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

# Properties

Form	Liquid
Purification	Affinity Purified
Buffer	PBS and 10 mM Sodium azide
Preservative	10 mM Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

# Bioinformation

Database links	GenelD: 11315 Human
	GenelD: 511268 Bovine
	Swiss-port # Q5E946 Bovine
	Swiss-port # Q99497 Human
Gene Symbol	PARK7
Gene Full Name	parkinson protein 7
Background	Park7, also known as DJ-1, is a member of the peptidase C56 family of proteins and is thought to function as a molecular chaperone. Mutations in park7 have been associated with autosomal recessive, early onset Parkinson's disease (Bonifati et al., 2003). Recently, park7 has been shown to inhibit microtubule associated protein 1B aggregation thus leading to neuronal apoptosis (Wang et al., 2011).
Highlight	Related products: <u>PARK7 antibodies;</u> <u>Anti-Mouse IgG secondary antibodies;</u> Related news: <u>Astrocyte-to-neuron conversion for Parkinson's disease treatment</u>
Research Area	Cancer antibody; Gene Regulation antibody; Metabolism antibody; Neuroscience antibody; Signaling Transduction antibody
Calculated Mw	20 kDa
PTM	Sumoylated on Lys-130 by PIAS2 or PIAS4; which is enhanced after ultraviolet irradiation and essential for cell-growth promoting activity and transforming activity. Cys-106 is easily oxidized to sulfinic acid. Undergoes cleavage of a C-terminal peptide and subsequent activation of protease activity in response to oxidative stress.

### Images



#### ARG52388 anti-PARK7 / DJ1 antibody [4H4] ICC/IF image

Immunofluorescence: HeLa cells stained with ARG52388 anti-PARK7 / DJ1 antibody [4H4] (green) showing strong cytoplasmic staining and ARG52468 anti-Vimentin antibody (red).



#### ARG52388 anti-PARK7 / DJ1 antibody [4H4] WB image

Western blot: Rat brain, Mouse brain, NIH/3T3, HeLa, HEK293 and C6 cell lysates stained with ARG52388 anti-PARK7 / DJ1 antibody [4H4] (green) at 1:5000 dilution. The blot was simultaneously stained with <u>ARG52468</u> anti-Vimentin antibody (red) at 1:5000 dilution.

Clone 4H4 detects protein with apparent molecular weight of 21 kDa but only in Human cell lines, since it does not recognize the Mouse or Rat DJ1 protein.