

Datasheet for ABIN7166460
anti-PARK7/DJ1 antibody (AA 1-188)



[Go to Product page](#)

4 Images

Overview

Quantity:	100 µg
Target:	PARK7/DJ1 (PARK7)
Binding Specificity:	AA 1-188
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PARK7/DJ1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant Human Protein/nucleic acid deglycase DJ-1 protein (1-188AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	PARK7/DJ1 (PARK7)
Alternative Name:	PARK7 (PARK7 Products)
Background:	Background: Protein and nucleotide deglycase that catalyzes the deglycation of the Maillard adducts formed between amino groups of proteins or nucleotides and reactive carbonyl groups

of glyoxals (PubMed:25416785, PubMed:28596309). Thus, functions as a protein deglycase that repairs methylglyoxal- and glyoxal-glycated proteins, and releases repaired proteins and lactate or glycolate, respectively. Deglycates cysteine, arginine and lysine residues in proteins, and thus reactivates these proteins by reversing glycation by glyoxals. Acts on early glycation intermediates (hemithioacetals and aminocarbinols), preventing the formation of advanced glycation endproducts (AGE) that cause irreversible damage (PubMed:25416785, PubMed:28013050, PubMed:26995087). Also functions as a nucleotide deglycase able to repair glycated guanine in the free nucleotide pool (GTP, GDP, GMP, dGTP) and in DNA and RNA. Is thus involved in a major nucleotide repair system named guanine glycation repair (GG repair), dedicated to reversing methylglyoxal and glyoxal damage via nucleotide sanitization and direct nucleic acid repair (PubMed:28596309). Also displays an apparent glyoxalase activity that in fact reflects its deglycase activity (PubMed:22523093). Plays an important role in cell protection against oxidative stress and cell death acting as oxidative stress sensor and redox-sensitive chaperone and protease, functions probably related to its primary function (PubMed:17015834, PubMed:20304780, PubMed:18711745, PubMed:12796482, PubMed:19229105, PubMed:25416785, PubMed:26995087). It is involved in neuroprotective mechanisms like the stabilization of NFE2L2 and PINK1 proteins, male fertility as a positive regulator of androgen signaling pathway as well as cell growth and transformation through, for instance, the modulation of NF-kappa-B signaling pathway (PubMed:12612053, PubMed:15502874, PubMed:14749723, PubMed:17015834, PubMed:21097510, PubMed:18711745). Eliminates hydrogen peroxide and protects cells against hydrogen peroxide-induced cell death (PubMed:16390825). Required for correct mitochondrial morphology and function as well as for autophagy of dysfunctional mitochondria (PubMed:19229105, PubMed:16632486). Plays a role in regulating expression or stability of the mitochondrial uncoupling proteins SLC25A14 and SLC25A27 in dopaminergic neurons of the substantia nigra pars compacta and attenuates the oxidative stress induced by calcium entry into the neurons via L-type channels during pacemaking (PubMed:18711745). Regulates astrocyte inflammatory responses, may modulate lipid rafts-dependent endocytosis in astrocytes and neuronal cells (PubMed:23847046). In pancreatic islets, involved in the maintenance of mitochondrial reactive oxygen species (ROS) levels and glucose homeostasis in an age- and diet dependent manner. Protects pancreatic beta cells from cell death induced by inflammatory and cytotoxic setting (By similarity). Binds to a number of mRNAs containing multiple copies of GG or CC motifs and partially inhibits their translation but dissociates following oxidative stress (PubMed:18626009). Metal-binding protein able to bind copper as well as toxic mercury ions, enhances the cell protection mechanism against induced metal toxicity (PubMed:23792957). In macrophages, interacts with the NADPH oxidase subunit NCF1

Target Details

to direct NADPH oxidase-dependent ROS production, and protects against sepsis (By similarity).

Aliases: CAP1 antibody, DJ-1 antibody, DJ1 antibody, DJ1 protein antibody, Epididymis secretory sperm binding protein Li 67p antibody, FLJ27376 antibody, FLJ34360 antibody, FLJ92274 antibody, HEL S 67p antibody, Oncogene DJ1 antibody, OTTHUMP00000001348 antibody, OTTHUMP00000001349 antibody, OTTHUMP00000001350 antibody, OTTHUMP00000001351 antibody, PARK7 antibody, PARK7_HUMAN antibody, Parkinson disease (autosomal recessive, early onset) 7 antibody, Parkinson disease protein 7 antibody, Parkinson protein 7 antibody, Protein DJ-1 antibody, SP22 antibody

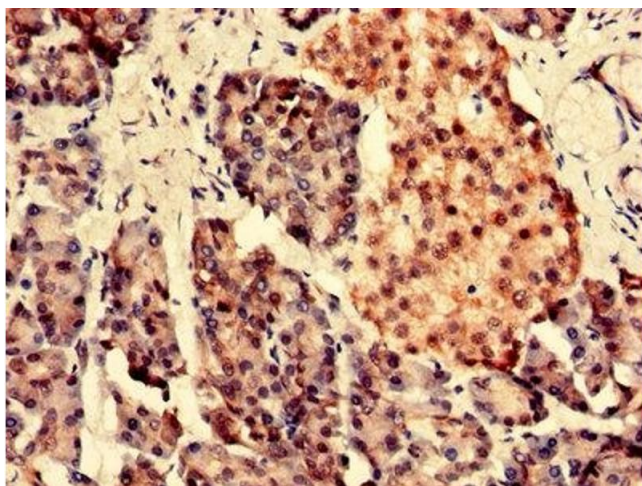
UniProt:	Q99497
Pathways:	Intracellular Steroid Hormone Receptor Signaling Pathway , Regulation of Intracellular Steroid Hormone Receptor Signaling , Proton Transport

Application Details

Application Notes:	Recommended dilution: WB:1:500-1:5000, IHC:1:20-1:200, IF:1:50-1:200,
Restrictions:	For Research Use only

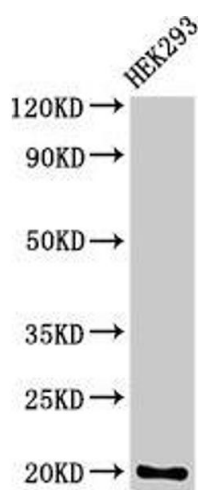
Handling

Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.



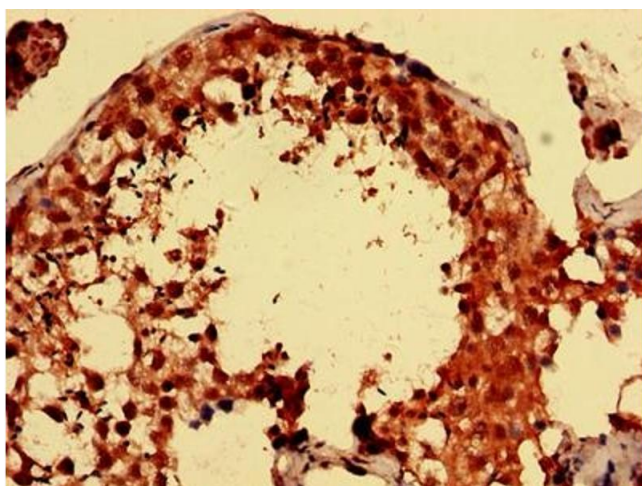
Immunohistochemistry

Image 1. Immunohistochemistry analysis of human pancreatic tissue using ABIN7166460 at dilution of 1:100



Western Blotting

Image 2. Western Blot Positive WB detected in: HEK293 whole cell lysate All lanes: PARK7 antibody at 3.4 µg/mL Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution Predicted band size: 20 kDa Observed band size: 20 kDa



Immunohistochemistry

Image 3. Immunohistochemistry analysis of human testis tissue using ABIN7166460 at dilution of 1:100

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN7166460.