# Rabbit PARK7/DJ1 Polyclonal Antibody | anti-PARK7/DJ1 antibody

Anti-PARK7/DJ1 Picoband Antibody

| CATALOG # | HOST | REACTIVITY | APPLICATIONS |
|---|---|---|---|
| **AAA19139** | **Rabbit** | **Mouse, RatNo cross reactivity with other proteins.** | **ELISA, Immunohistochemistry, Western Blot** |

## PRODUCT SYNONYMS

PARK7/DJ1; Polyclonal Antibody; Anti-PARK7/DJ1 Picoband Antibody; Protein DJ-1; DJ-1; Contraception-associated protein 1; anti-PARK7/DJ1 antibody

## PRODUCT SPECIFICATIONS

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| **Host** | Rabbit |
| **Reactivity** | Mouse, Rat<br>No cross reactivity with other proteins. |
| **Clonality** | Polyclonal |
| **Purity/Purification** | Immunogen affinity purified |
| **Form/Format** | Lyophilized |
| **Concentration** | Add 0.2ml of distilled water will yield a concentration of 500ug/ml. (varies by lot) |
| **Sequence Length** | 189 |
| **Applicable Applications for anti-PARK7/DJ1 antibody** | ELISA, IHC (Immunohistochemistry), WB (Western Blot) |
| **Application Notes** | WB: 0.1-0.5mug/ml<br>Immunohistochemistry (Paraffin-embedded Section): 0.5-1mug/ml<br>ELISA(Cap): 1-5mug/ml |
| **Immunogen** | E Coli-derived rat PARK7/DJ1 recombinant protein (Position: A2-D189). |
| **Subcellular Localization** | Cell membrane |
| **Tissue Specificity** | Ubiquitous. Detected on epididymal sperm. Highly expressed in testis and prostate. Detected at lower levels in heart, lung, brain, liver, kidney, seminal vesicle, caput and corpus epididymis. |
| **Reconstitution** | Add 0.2ml of distilled water will yield a concentration of 500ug/ml. |
| **Contents** | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3. |
| **Preparation and Storage** | Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing. |

## IMAGES

**IHC (Immunohistochemistry)**
Figure 7. IHC analysis of PARK7 / DJ1 using anti-PARK7 / DJ1 antibody (AAA19139).PARK7 / DJ1 was detected in paraffin-embedded section of rat testis tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PARK7 / DJ1 Antibody (AAA19139) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

**IHC (Immunohistochemistry)**
Figure 5. IHC analysis of PARK7 / DJ1 using anti-PARK7 / DJ1 antibody (AAA19139).PARK7 / DJ1 was detected in paraffin-embedded section of rat liver tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PARK7 / DJ1 Antibody (AAA19139) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

**IHC (Immunohistochemistry)**
Figure 3. IHC analysis of PARK7 / DJ1 using anti-PARK7 / DJ1 antibody (AAA19139).PARK7 / DJ1 was detected in paraffin-embedded section of mouse pancreas tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PARK7 / DJ1 Antibody (AAA19139) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

**IHC (Immunohistchemistry)**
Figure 6. IHC analysis of PARK7 / DJ1 using anti-PARK7 / DJ1 antibody (AAA19139).PARK7 / DJ1 was detected in paraffin-embedded section of rat pancreas tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PARK7 / DJ1 Antibody (AAA19139) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

**IHC (Immunohistochemistry)**
Figure 4. IHC analysis of PARK7 / DJ1 using anti-PARK7 / DJ1 antibody (AAA19139).PARK7 / DJ1 was detected in paraffin-embedded section of mouse testis tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PARK7 / DJ1 Antibody (AAA19139) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

**IHC (Immunohistochemistry)**
Figure 2. IHC analysis of PARK7 / DJ1 using anti-PARK7 / DJ1 antibody (AAA19139).PARK7 / DJ1 was detected in paraffin-embedded section of mouse liver tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PARK7 / DJ1 Antibody (AAA19139) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

## ADDITIONAL INFORMATION

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| **Related Product Information for anti-PARK7/DJ1 antibody** | Description: Parkinson disease (autosomal recessive, early onset) 7, also known as DJ1, is a protein which in humans is encoded by the PARK7 gene. PARK7 belongs to the peptidase C56 family of proteins. PARK7 is mapped to chromosome 1p36. It acts as a positive regulator of androgen receptor-dependent transcription. It is also involved in tumorigenesis and in maintaining mitochondrial homeostasis. This gene may also function as a redox-sensitive chaperone, as a sensor foroxidative stress, and it apparently protects neurons against oxidative stress and cell death. It has been found that PARK7 mutations that impair transcriptional coactivator function can render dopaminergic neurons vulnerable to apoptosis and may contribute to the pathogenesis of Parkinson disease. Protein Function: Plays an important role in cell protection against oxidative stress and cell death acting as oxidative stress sensor and redox-sensitive chaperone and protease. 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. Its involvement in protein repair could also explain other unrelated functions. Eliminates hydrogen peroxide and protects cells against hydrogen peroxide-induced cell death. Required for correct mitochondrial morphology and function as well as for autophagy of dysfunctional mitochondria. 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. Regulates astrocyte inflammatory responses, may modulate lipid rafts-dependent endocytosis in astrocytes and neuronal cells. Binds to a number of mRNAs containing multiple copies of GG or CC motifs and partially inhibits their translation but dissociates following oxidative stress. Metal-binding protein able to bind copper as well as toxic mercury ions, enhances the cell protection mechanism against induced metal toxicity (By similarity). In macrophages, interacts with the NADPH oxidase subunit NCF1to direct NADPH oxidase-dependent ROS production, and protects against sepsis (By similarity). Has been described as a protein deglycase that repairs methylglyoxal- and glyoxal-glycated amino acids and 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). However, another work ascribes the deglycation activity to a TRIS buffer artifact (By similarity). |

## NCBI AND UNIPROT INFORMATION

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| **NCBI GI #** | 471013391 |
| **NCBI GeneID** | 117287 |
| **NCBI Accession #** | NP_001264179.1 |
| **NCBI GenBank Nucleotide #** | NM_001277250.1 |
| **UniProt Accession #** | O88767 |
| **Molecular Weight** | 19,974 Da |
| **NCBI Official Full Name** | protein/nucleic acid deglycase DJ-1 isoform 2 |
| **NCBI Official Synonym Full Names** | Parkinsonism associated deglycase |
| **NCBI Official Symbol** | Park7 |
| **NCBI Official Synonym Symbols** | Dj1; CAP1; DJ-1; SP22 |
| **NCBI Protein Information** | protein/nucleic acid deglycase DJ-1 |
| **UniProt Protein Name** | Protein/nucleic acid deglycase DJ-1 |
| **UniProt Gene Name** | **Park7** |
| **UniProt Synonym Gene Names** | DJ-1 |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/polyclonal/park7-dj1-antibody-immunohistochemistry-western-blot-elisa/19139