Human DJ-1/PARK7 antibody

Catalog Number: ATGA0292

PRODUCT INFORMATION

Catalog number
ATGA0292

Clone No.
AT1E12

Product type
Monoclonal Antibody

UnitProt No.
Q99497

NCBI Accession No.
NP_009193

Alternative Names
Parkinson disease protein 7, Parkinsonism associated deglycase, parkinson protein 7, Parkinson disease autosomal recessive early onset 7, Maillard deglycase, Oncogene DJ1, Protein DJ-1, DJ-1, DJ1, GATD2, Protein/nucleic acid deglycase DJ-1

PRODUCT SPECIFICATION

Antibody Host
Mouse

Reacts With
Human

Concentration
1mg/ml (determined by BCA assay)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen
Recombinant human Park7/DJ-1 (1-189aa) purified from E. coli

Isotype
IgG2b kappa

Purification Note
By protein-A affinity chromatography

Application
ELISA, WB, ICC/IF, FACS

Usage
The antibody has been tested by ELISA, Western blot, ICC/IF and FACS analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

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Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

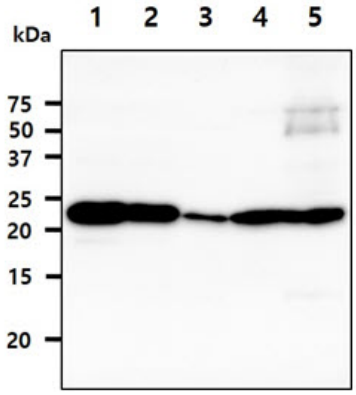
Parkinson disease (autosomal recessive, early onset) 7, also known as PARK7/DJ-1, has been shown to interact with EFCAB6 and protein inhibitor of activated STAT2. Defects in PARK7 are the cause of autosomal recessive early-onset Parkinson's disease 7. This protein belongs to the peptidase C56 family of proteins. It acts as a positive regulator of androgen receptor-dependent transcription. It may also function as a redox-sensitive chaperone, as a sensor for oxidative stress, and it apparently protects neurons against oxidative stress and cell death.

General References

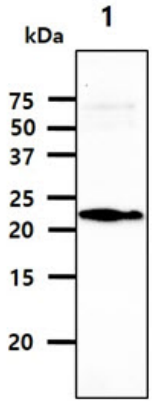
Entrez Gene: PARK7
Bonifati V., et al. (2003) Science 299 (5604): 256-259.
Takahashi K., et al. (2001) J. Biol. Chem. 276 (40): 37556-63.

DATA

Western blot analysis (WB)



The cell and tissue lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human PARK7 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.
Lane 1.: HeLa cell lysate
Lane 2.: Jurkat cell lysate
Lane 3.: NIH3T3 cell lysate
Lane 4.: Mouse brain tissue lysate
Lane 5.: Mouse liver tissue lysate



The tissue lysate (40ug) was resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human PARK7 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.
Lane 1.: Mouse Kidney tissue lysate

Immunocytochemistry/Immunofluorescence (ICC/IF)

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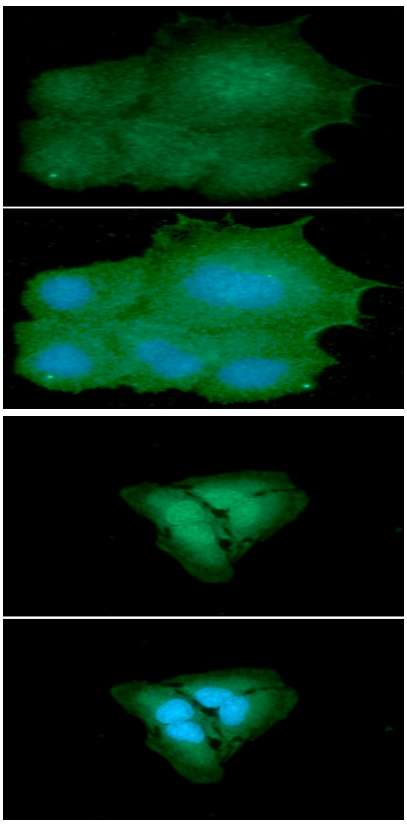

ICC/IF analysis of PARK7 in Hep3B cells. The cell was stained with ATGA0292 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

ICC/IF analysis of PARK7 in HeLa cells. The cell was stained with ATGA0292 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).

Flow cytometry (FACS)

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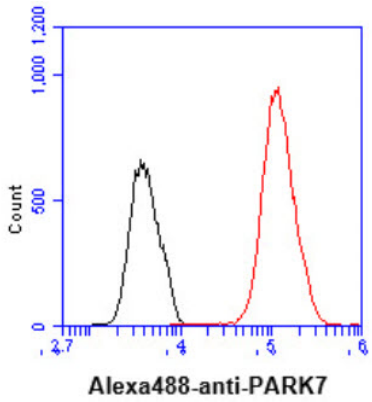
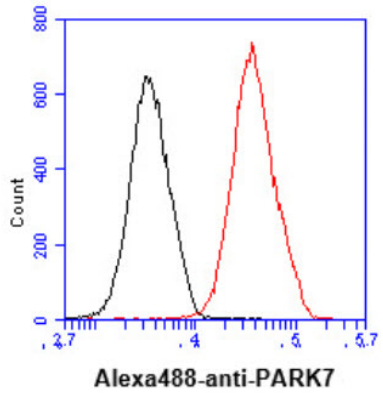


Flow cytometry analysis of PARK7 in Hep3B cell line, staining at 2-5ug for 1x10^6cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).



Flow cytometry analysis of PARK7 in HeLa cell line, staining at 2-5ug for 1x10^6cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).