

Monoclonal anti-human PARK7 antibody (clone AT1E12)

Mouse IgG_{2b}, κ

Cat. No. IBATGA0292

Immunogen: Recombinant PARK7 (1-189aa) purified from E. coli.

NCBI Accession No.: NP_009193

Isotype: Mouse IgG_{2b} heavy chain and κ light chain

Clone: Anti-human PARK7 mAb, clone AT1E12, is derived from hybridization of mouse F0 myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human PARK7 protein.

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.

Concentration: 1mg/ml

Form: Liquid. In Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% Glycerol

Storage: Can be stored at +4°C. For long term storage, aliquot and store at -20°C. Avoid repeated freezing and thawing cycles.

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

Application: ELISA, WB, Flow cytometry, ICC/IF



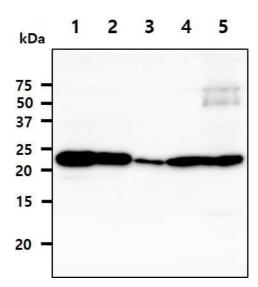


Western blot analysis

The cell and tissue lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with antihuman 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

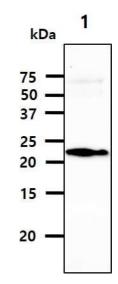
Lane 5.: Mouse liver tissue lysate

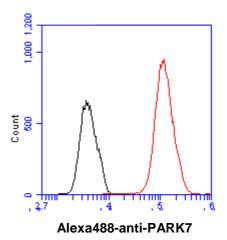


Western blot analysis

The tissue lysate (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.: Kidney tissue lysate





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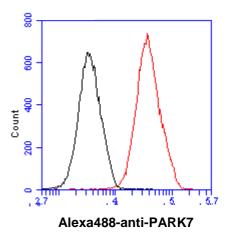
Flow cytometry

Flow cytometry analysis of PARK7 in Hep3B cell line, staining at 2-5ug for 1x10⁶cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).



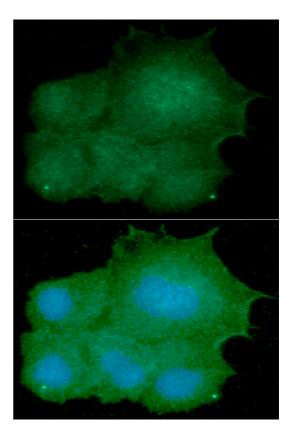
Flow cytometry

Flow cytometry analysis of PARK7 in HeLa cell line, staining at 2-5ug for 1x10⁶cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).



ICC/IF analysis

ICC/IF analysis of PARK7 in Hep3B cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human PARK7 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).



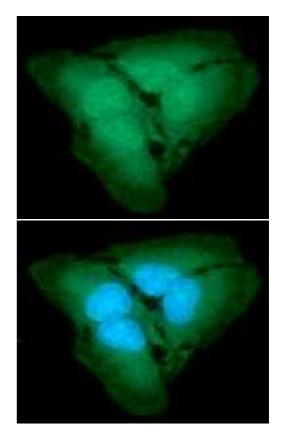
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ICC/IF analysis

ICC/IF analysis of PARK7 in HeLa cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human PARK7 antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).



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.

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