Data Sheet (Cat.No.TMAB-01332)

Anti-PARK7/DJ-1 Polyclonal Antibody

Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse,Rat (predicted:Pig,Cow,Horse)
Molecular Weight:	Theoretical: 20 kDa. Actual: 22 kDa.
Purification:	Protein A purified

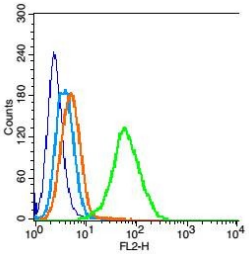
Applications

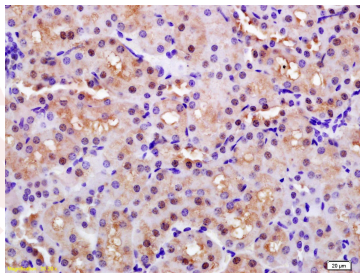
Verified Activity:	1. Blank control: 293T cells (blue). Primary Antibody: Rabbit Anti-PARK7/CAP1 antibody (TMAB-01332), Dilution: 0.2 μg in 100 μL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG (orange),used under the same conditions. Secondary Antibody: Goat anti-rabbit IgG-Pe (white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA. Protocol Primary antibody (TMAB-01332, 0.2 μg/1x10^6 cells) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 10% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. 2. Tissue/cell: rat kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH6.0), Boiling bathing for 15 min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30 min; Blocking buffer (normal goat serum) at 37°C for 20 min; Incubation: Anti-CAP1/PARK7 Polyclonal Antibody, Unconjugated (TMAB-01332) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody and DAb staining. 3. Tissue/cell: rat kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH6.0), Boiling bathing for 15 min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30 min; Blocking buffer (normal goat serum) at 37°C for 20 min; Incubation: Anti-CAP1/PARK7 Polyclonal Antibody, Unconjugated (TMAB-01332) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody and DAb staining. 4. The blue histogram is unstained cells (Hepg2 cells) concentration 1:50 The Wathet Blue histogram is cells stained with secondary antibody alone. The Orange histogram is cells stained with rabbit IgG isotype control antibody plus secondary antibody. The green histogram is cells stained with Rabbit Anti-PARK7/CAP1 antibody (TMAB-01332) plus secondary antibody. 5. Sample: Lane 1: Testis (Mouse) Lysate at 40 μg Lane 2: Liver (Mouse) Lysate at 40 μg Lane 3: Cerebrum (Rat) Lysate at 40 μg Lane 4: Thyroid gland Rat) Lysate at 40 μg Lane 5: Kidney (Rat) Lysate at 40 μg Lane 6: Liver (Rat) Lysate at 40 μg Lane 7: Hela (Human) Cell Lysate at 30 μg Lane 8: U937 (Human) Cell Lysate at 30 μg

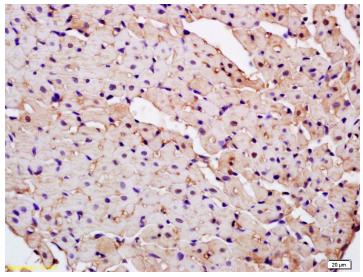
Lane 9: K562 (Human) Cell Lysate at 30 µg
Lane 10: HL60 (Human) Cell Lysate at 30 µg
Primary:
Anti-PARK7/DJ1 (TMAB-01332) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 22 kDa
Observed band size: 22 kDa

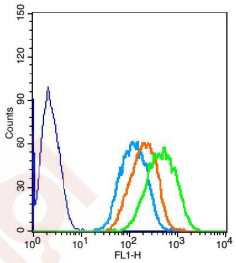
6. Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (PARK7) Polyclonal Antibody, Unconjugated (TMAB-01332) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructionsand DAB staining.

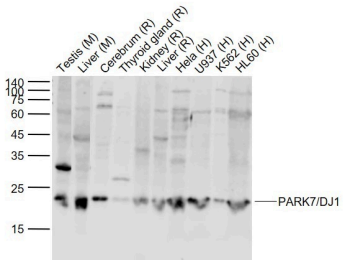
7. Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (PARK7) Polyclonal Antibody, Unconjugated (TMAB-01332) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructionsand DAB staining.

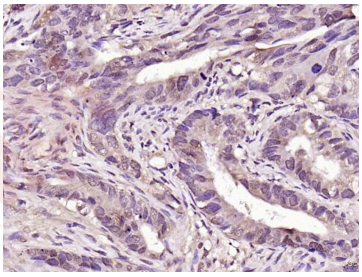


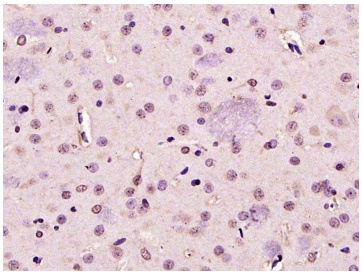












Application:	FCM,IF,IHC-Fr,IHC-P,WB
Recommended	WB: 1:500-2000; IHC-P: 1:100-500; IHC-Fr: 1:100-500; IF: 1:100-500; FCM: 0.2μg/Test

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthetic peptide: human CAP1
Antigen Species:	Human
Gene ID:	11315
Uniprot ID:	Q99497
Synonyms:	parkinson protein 7;DJ-1;HEL-S-67p;DJ1
Biology Area:	Small G proteins,DNA / RNA binding,Oxidative stress,Parkin / PARK,Regulators

Research Background

PARK7/DJ1 is a ubiquitously expressed protein involved in various cellular processes including cell proliferation, RNA-binding, and oxidative stress. The protein has been found to colocalize within a subset of pathologic tau inclusions in a diverse group of neurodegenerative disorders known as tauopathies (Rizzu et al. 2004). Defects in PARK7/DJ1 are the cause of autosomal recessive early-onset Parkinson's disease 7 (PARK7). Parkinson's disease (PD) is a complex, multifactorial disorder that typically manifests after the age of 50 years. The disease is characterized by bradykinesia, resting tremor, muscular rigidity and postural instability. The pathology involves the loss of dopaminergic neurons in the substantia nigra and the presence of Lewy bodies (intraneuronal accumulations of aggregated proteins), in surviving neurons in various areas of the brain. PARK7 is characterized by onset before 40

years and slow progression. It has also been suggested that PARK7/DJ1 is a mitogen dependent oncogene product involved in Ras related signal transduction pathways.

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