**bs-1306R** **[ Primary Antibody ]**

# PARK7/DJ1 Rabbit pAb

www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

## DATASHEET

**Host:** Rabbit **Isotype:** IgG

**Clonality:** Polyclonal

**GeneID:** 11315 **SWISS:** Q99497

**Target:** PARK7/DJ1

**Immunogen:** KLH conjugated synthetic peptide derived from human CAP1: 101-189/189.

**Purification:** affinity purified by Protein A

**Concentration:** 1mg/ml

**Storage:** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

**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.

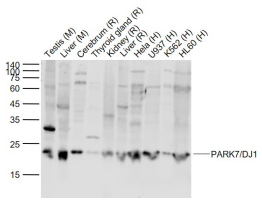
**Applications:** **WB** (1:500-2000)
**IHC-P** (1:100-500)
**IHC-F** (1:100-500)
**IF** (1:100-500)
**Flow-Cyt** (0.2µg/Test)

**Reactivity:** Human, Mouse, Rat (predicted: Pig, Cow, Horse)

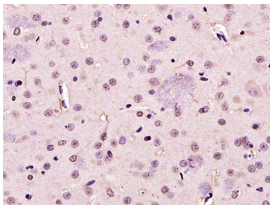
**Predicted MW.:** 20 kDa

**Subcellular Location:** Cell membrane ,Nucleus

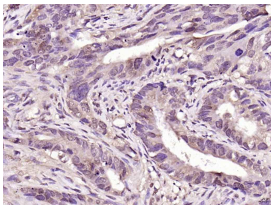
## VALIDATION IMAGES



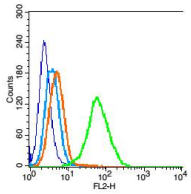

Sample: Lane 1: Testis (Mouse) Lysate at 40 ug Lane 2: Liver (Mouse) Lysate at 40 ug Lane 3: Cerebrum (Rat) Lysate at 40 ug Lane 4: Thyroid gland Rat) Lysate at 40 ug Lane 5: Kidney (Rat) Lysate at 40 ug Lane 6: Liver (Rat) Lysate at 40 ug Lane 7: Hela (Human) Cell Lysate at 30 ug Lane 8: U937 (Human) Cell Lysate at 30 ug Lane 9: K562 (Human) Cell Lysate at 30 ug Lane 10: HL60 (Human) Cell Lysate at 30 ug Primary: Anti-PARK7/DJ1 (bs-1306R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 22 kD Observed band size: 22 kD



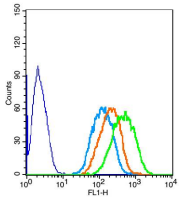
Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PARK7) Polyclonal Antibody, Unconjugated (bs-1306R ) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PARK7) Polyclonal Antibody, Unconjugated (bs-1306R ) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.




Blank control: 293T cells(blue). Primary Antibody: Rabbit Anti-PARK7/CAP1 antibody(bs-1306R), Dilution: 0.2µg 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 (bs-1306R, 0.2µg /1x10^6 cells) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% 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. Acquisition of 20,000 events was performed.




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 (bs-1306R)plus secondary antibody.

## SELECTED CITATIONS


- **[IF=4]** Rui Liu. et al. Response of protein DJ-1 to oxidative stress in porcine longissimus thoracis and semimembranous muscles: expression, oxidation, and protein interactions during postmortem aging. J FOOD COMPOS ANAL. 2024 Nov;:106998 WB ;Pig. 10.1016/j.jfca.2024.106998