

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Park7/DJ-1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Park7/DJ-1 Met1-Asp189 Accession # Q99497
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

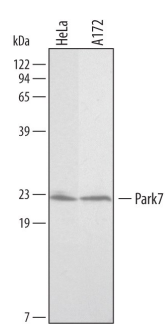
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.2 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	Immersion fixed paraffin-embedded sections of human brain (hypothalamus)
Simple Western	2 µg/mL	See Below

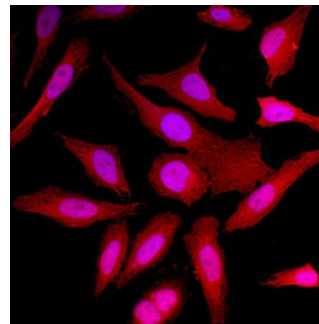
DATA

Western Blot



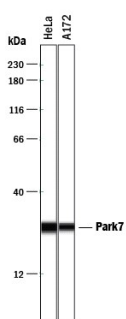
Detection of Human Park7/DJ-1 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line and A172 human glioblastoma cell line. PVDF membrane was probed with 0.2 µg/mL of Goat Anti-Human Park7/DJ-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3995) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for Park7/DJ-1 at approximately 22 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

Immunocytochemistry



Park7/DJ-1 in HeLa Human Cell Line. Park7/DJ-1 was detected in immersion fixed HeLa human cervical epithelial carcinoma cell line using Goat Anti-Human Park7/DJ-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3995) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Simple Western



Detection of Human Park7/DJ-1 by Simple Western™. Simple Western lane view shows lysates of HeLa human cervical epithelial carcinoma cell line and A172 human glioblastoma cell line, loaded at 0.2 mg/mL. A specific band was detected for Park7/DJ-1 at approximately 28 kDa (as indicated) using 2 µg/mL of Goat Anti-Human Park7/DJ-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3995) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Park7, also known as DJ-1, is a cytoplasmic protein that belongs to the ThiJ/Pfp1/DJ-1 superfamily of highly conserved proteins that function as protein chaperones, catalases, proteases and kinases. Park7 is widely expressed in the brain as well as in peripheral tissues. It exists as a homodimer that can be localized in the cytoplasm, nucleus and mitochondria. Park7 is a redox-sensitive protein that has been ascribed various functions including that as a redox sensor and antioxidant protein. Mutations in Park7 are associated with a small percentage of hereditary early onset Parkinson's disease.