**BACKGROUND**

Parkin is a zinc-finger protein that is related to ubiquitin at the amino terminus. The wild type Parkin gene, which maps to human chromosome 6q26, encodes a 465 amino acid full-length protein that is expressed as multiple isoforms. Mutations in the Parkin gene are responsible for autosomal recessive juvenile Parkinson’s disease and commonly involve deletions of exons 3-5. In humans, Parkin is expressed in a subset of cells of the basal ganglia, midbrain, cerebellum and cerebral cortex, and is subject to alternative splicing in different tissues. Parkin expression is also high in the brainstem of mice, with the majority of immunopositive cells being neurons. The Parkin gene has been identified in a diverse group of organisms including mammals, birds, frog and fruit flies, suggesting that analogous functional roles of the Parkin protein may have been highly conserved during the course of evolution.

**CHROMOSOMAL LOCATION**

Genetic locus: PARK2 (human) mapping to 6q26.

**SOURCE**

Parkin (H-8) is a mouse monoclonal antibody raised against amino acids 61-360 mapping within an internal region of Parkin of human origin.

**PRODUCT**

Each vial contains 200 µg IgG₂κ light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Parkin (H-8) is available conjugated to agarose (sc-136989 AC), 50 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-136989 HRP), 200 µg/ml, for WB, IHC(IP) and ELISA; to either phycoerythrin (sc-136989 PE), fluorescein (sc-136989 FITC), Alexa Fluor® 488 (sc-136989 AF488), Alexa Fluor® 546 (sc-136989 AF546), Alexa Fluor® 594 (sc-136989 AF594) or Alexa Fluor® 647 (sc-136989 AF647), 200 µg/ml, for WB (RGB), IF, IHC(IF) and FCM; and to either Alexa Fluor® 680 (sc-136989 AF680) or Alexa Fluor® 790 (sc-136989 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

Parkin (H-8) is recommended for detection of Parkin of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Parkin siRNA (h): sc-42158, Parkin shRNA Plasmid (h): sc-42158-SH and Parkin shRNA (h) Lentiviral Particles: sc-42158-V.

Molecular Weight of Parkin: 50-58 kDa.

Positive Controls: HEL 92.1.7 cell lysate: sc-2270, IMR-32 cell lysate: sc-2409 or PC-3 cell lysate: sc-2220.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.
2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**DATA**

![Parkin Western blot analysis](image)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA