

p-Parkin (Ser 101): sc-135704

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. Human Parkin is phosphorylated on Ser 378 at the C-terminus by CK-1.

REFERENCES

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CHROMOSOMAL LOCATION

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

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

SOURCE

p-Parkin (Ser 101) is a rabbit polyclonal antibody raised against a short amino acid sequence containing phosphorylated Ser 101 of Parkin of human origin.

PRODUCT

Each vial contains IgG in 100 µl of 10 mM HEPES with 150 mM NaCl, 50% glycerol and < 0.1% BSA.

APPLICATIONS

p-Parkin (Ser 101) is recommended for detection of Ser 101 phosphorylated Parkin of human origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:100-1:5000) and immunoprecipitation [1-2 µl per 100-500 µg of total protein (1 ml of cell lysate)].

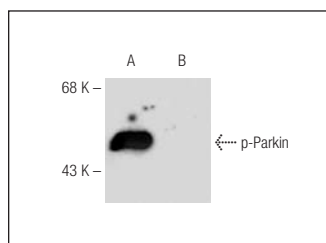
Suitable for use as control antibody for Parkin siRNA (h): sc-42158, Parkin shRNA Plasmid (h): sc-42158-SH and Parkin shRNA (h) Lentiviral Particles: sc-42158-V.

Molecular Weight of p-Parkin: 50-58 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent) 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



p-Parkin (Ser 101): sc-135704. Western blot analysis of Parkin phosphorylation in 293 cells transfected with wild type Parkin (A) and Ser 101 mutated (non-phosphorylated) Parkin (B).

RESEARCH USE

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

PROTOCOLS

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