BACKGROUND
Poly(ADP-ribose) polymerase-2 (PARP-2) is part of the base excision repair (BER) pathway, catalyzing the poly(ADP-ribose)ylation of nuclear proteins. Poly(ADP-ribose)ylation, a post-translational modification following DNA damage, appears as an obligatory step in a detection/signaling pathway leading to the repair of DNA strand breaks. PARP-2 is a nuclear, DNA-binding protein, which interacts with PARP-1. PARP-2 is present in actively dividing tissues with highest levels in the kidney, skeletal muscle, liver, heart and spleen. Human PARP-2 maps to chromosome 14q11.2.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: PARP2 (human) mapping to 14q11.2; Parp2 (mouse) mapping to 14 C1.

SOURCE
PARP-2 (F-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 103-138 near the N-terminus of PARP-2 of human origin.

PRODUCT
Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.
Blocking peptide available for competition studies, sc-393310 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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

APPLICATIONS
PARP-2 (F-3) is recommended for detection of PARP-2 of mouse, rat and 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).
Molecular Weight of PARP-2: 62 kDa.
Positive Controls: PARP-2 (m): 293T Lysate: sc-122386.

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 Luminal Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA

SELECT PRODUCT CITATIONS

PROTOCOLS
See our website at www.scbt.com for detailed protocols and support products.