



Qty: 1 mL

Mouse anti-Parkin

Catalog No. 39-0900

Lot No.

Mouse anti-Parkin

FORM

This monoclonal antibody is supplied as a 1 mL aliquot of tissue culture supernatant containing 0.1% sodium azide.

CLONE: PRK109

ISOTYPE: Mouse IgG₁-kappa

IMMUNOGEN

Full length recombinant human Parkin (The human Parkin sequence shares ~83% sequence homology with mouse and rat.)

SPECIFICITY

This antibody reacts with the ~50 kDa Parkin protein. Western blots of rat brain may also show a band of unknown origin at ~44 kDa. This antibody binds to the second RING domain (C-terminal region) of parkin protein.¹ While the specific 50 kDa parkin signal was detected in Western blots of high salt fractions of wild-type mouse brain, no signal was detected in parkin-null mouse brain samples.¹

REACTIVITY

Reactivity has been confirmed with recombinant human Parkin protein, human Parkin-transfected CHO cells, and human, mouse, and rat brain tissue homogenates.¹

Sample	ELISA	Immunoprecipitation ¹	Immunofluorescence ¹	Western Blotting ¹
Human	ND	+++	+++	+++
Mouse	ND	+++	ND	+++
Rat	ND	ND	ND	+++
Immunogen	+++	ND	ND	+++

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 1:100 - 1:1000
Immunoprecipitation¹: 100 µL/test
Western Blotting¹: 1:20 - 1:100
Immunofluorescence¹: 1:20 - 1:100

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

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BACKGROUND

Parkin is a ubiquitin-protein isopeptide ligase (E3) involved in ubiquitin/proteasome-mediated protein degradation. Parkin may protect cells from premature death by targeting misfolded or damaged proteins for degradation via the ubiquitin proteasome pathway. Mutations in the *parkin* gene cause a loss-of-function and/or alter protein levels of parkin. The loss of functional parkin is the most common single cause of autosomal recessive Parkinson's disease.¹⁻²

Parkin expression is neuron-specific and developmentally regulated, and thus, has a role in neuronal maturation. Parkin may also play roles in cell cycle regulation and tumor suppression.³

REFERENCES

1. Pawlyk AC, et al. *J Biol Chem* 278(48): 48120-48128, 2003.
2. Henn IH, et al. *J Neurochem* 92(1): 114-22, 2005.
3. West AB, et al. *J Biol Chem* 279(28): 28896-28902, 2004.

RELATED PRODUCTS

Product	Conjugate	Cat. No.
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

Conjugate	ZyMAX™ Goat x Rabbit IgG (H+L)	ZyMAX™ Goat x Mouse IgG (H+L)
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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