Phospho-Parkin (pS65) Rabbit Polyclonal Antibody

Cat. # AB142

Background: Parkin is a crucial regulator of mitochondrial homeostasis and plays a pivotal role in mitophagy, the process of selectively removing damaged mitochondria. Upon mitochondrial depolarization, PINK1 kinase phosphorylates ubiquitin and Parkin at their respective serine 65 residues, initiating Parkin translocation to damaged mitochondria. Phosphorylation of Parkin is a key post-translational modification that activates its E3 ubiquitin ligase activity and promotes mitochondrial clearance. This antibody enables researchers to investigate the dynamics of Parkin phosphorylation and its impact on mitophagy in various cellular and disease contexts. With its high specificity and sensitivity, the Phospho-Parkin (pS65) antibody offers valuable insights into the mechanisms underlying mitochondrial quality control and may hold therapeutic implications in neurodegenerative diseases associated with mitochondrial dysfunction.

Application: Western blotting. For all applications, optimal conditions should be determined by the end user.

Product Information

Immunogen:	Phospho-Parkin (pS65)
Purification:	Polyclonal antibodies are produced by immunizing rabbits with a synthetic peptide surrounding pS65 of Parkin. Antibodies were recovered by affinity purification and subjected to an additional immunodepletion step with control peptides.
Specificity:	Antibody detects Parkin only when phosphorylated at serine 65.
Supplied as:	Liquid, phosphate-buffered saline with 50% glycerol
MW:	52 kDa (native)
Quantity:	100µl
Storage:	Store at -20°C. Avoid repeated freeze/thaw cycles.

References

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Data

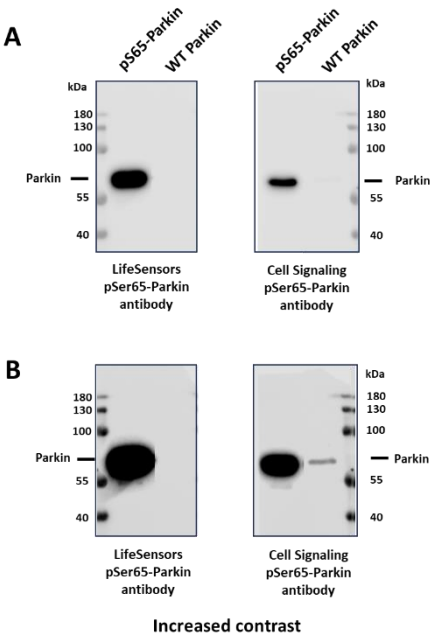

Fig. 1. **(A)** Western blot analysis of recombinant pS65-Parkin and WT Parkin expressed as a His-SUMO fusion (200ng/lane) and probed with LifeSensors' pS65-Parkin antibody (*left*) and Cell Signaling's pS65-Parkin antibody (*right*). LifeSensors' antibody has a 9-fold greater affinity for pS65-Parkin than Cell Signaling's antibody (chemiluminescent quantitation not shown). **(B)** After increasing contrast, the LifeSensors antibody does not detect WT Parkin, which is detected with the Cell Signaling antibody, indicating higher specificity for pS65-Parkin.

Left: LifeSensors pS65-Parkin rb pAb (0.06µg/ml)
Right: Cell Signaling pS65 rb mAb #36866 (0.06µg/ml, 1:1000 as suggested)