

Parkin (phosphorylated)

Cat. # UB317A

Background:

Parkin is a unique, multifunctional ubiquitin ligase whose various roles in the cell, particularly in neurons. Parkinson's disease (PD) has been shown to associate with Parkin gene. Parkin is an RBR E3 ubiquitin ligase, which consists of a ubiquitin-like domain (Ubl) at its N terminus and four zinc-coordinating RING-like domains: RING0, RING1, IBR and RING2. PINK1 acts upstream of parkin and is required for parkin activation and recruitment to depolarized mitochondria. PINK1 phosphorylates parkin Ubl domain on residue Ser65 to activate parkin.(1-3)

Product Information

Purity:	≥ 95% by SDS-PAGE
Molecular Weight:	64 kDa
Quantity:	25 µg
Physical State:	Liquid
Source:	Human Recombinant
Tag:	His ₆ SUMO
Storage:	-80° C. Avoid repeated freeze/thaw cycles

References

1. Ham SJ, Lee SY, Song S, Chung JR, Choi S, Chung J. Interaction between RING1 (R1) and the Ubiquitin-like (UBL) Domains Is Critical for the Regulation of Parkin Activity. *J Biol Chem.* 2016;291(4):1803-16. doi: 10.1074/jbc.M115.687319. PubMed PMID: 26631732; PMCID: PMC4722459.
2. Wauer T, Swatek KN, Wagstaff JL, Gladkova C, Pruneda JN, Michel MA, Gersch M, Johnson CM, Freund SMV, Komander D. Ubiquitin Ser65 phosphorylation affects ubiquitin structure, chain assembly and hydrolysis. *The EMBO Journal.* 2015;34(3):307-25. doi: 10.15252/emj.201489847. PubMed PMID: PMC4339119.
3. Aguilera MA, Korac J, Durcan TM, Trempe J-F, Haber M, Gehring K, Elsasser S, Waidmann O, Fon EA, Husnjak K. The E3 Ubiquitin Ligase Parkin Is Recruited to the 26 S Proteasome via the Proteasomal Ubiquitin Receptor Rpn13. *Journal of Biological Chemistry.* 2015;290(12):7492-505. doi: 10.1074/jbc.M114.614925.

All products are for research use only • Not intended for human or animal diagnostic or therapeutic uses
Copyright © 2009 LifeSensors, Inc. All Rights Reserved