

Rabbit antibody to Parkin (305-323): whole serum

Catalogue No.:	R-113-100
Description:	<p>FUNCTION: Functions within a multiprotein E3 ubiquitin ligase complex, catalyzing the covalent attachment of ubiquitin moieties onto substrate proteins. These substrates include SYT11, CCNE1, GPR37, STUB1, a 22 kDa O-linked glycosylated isoform of SNCAIP and SEPT5. May play a more general role in the ubiquitin proteasomal pathway by participating in the removal and/or detoxification of abnormally folded or damaged protein. Loss of this ubiquitin ligase activity appears to be the mechanism underlying pathogenesis of PARK2. May protect neurons against alpha synuclein toxicity, proteasomal dysfunction, GPR37 accumulation, and kainate-induced excitotoxicity. May play a role in controlling neurotransmitter trafficking at the presynaptic terminal and in calcium-dependent exocytosis. Regulates cyclin E during neuronal apoptosis. May represent a tumor suppressor gene. SUBCELLULAR LOCATION: Cytoplasm. Co-localizes with STY11 in neurites. Co-localizes with SNCAIP in brainstem Lewy bodies. TISSUE SPECIFICITY: Highly expressed in the brain including the substantia nigra. Expressed in heart, testis and skeletal muscle. Expression is down-regulated or absent in tumor biopsies, and absent in the brain of PARK2 patients. Overexpression protects dopamine neurons from kainate-mediated apoptosis.</p>
Batch No.:	See product label
Unit size:	100 uL
Antigen:	A synthetic peptide (RILGEEQYNRYQQYGAEEC) as part of human Parkin conjugated to diphtheria toxoid has been used as the immunogen.
Other Names:	Ubiquitin E3 ligase PRKN; Parkinson juvenile disease protein 2; Parkinson disease protein 2; PARK2; PRKN
Accession:	PRKN2_HUMAN
Produced in:	Rabbit
Purity:	Whole serum
Applications:	IHC, WB, immunoblot, 1-site ELISA. A dilution of 1:500 to 1:2000 is recommended for these applications. This antiserum stains trigeminal motor neurons in rat brain stem. A 50 kDa band was identified in rat brain extract using western blot. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
Specificity:	This antiserum is known to specifically recognise Parkin shown by IHC and WB.
Cross-reactivity:	This antibody is known to react with Parkin of guinea pig and rat.
Form:	Lyophilised
Reconstitution:	Reconstitute in 100 uL of sterile water. Centrifuge to remove any insoluble material.
Storage:	After reconstitution keep aliquots at -20C for a higher stability, and at 2-8C with an appropriate antibacterial agent. Glycerol (1:1) may be added for an additional stability. Avoid repetitive freeze/thaw cycles.
Expiry Date:	12 months after purchase
Specific References:	1. E. Rubio de la Torre et al (2009) Combined kinase inhibition modulates parkin inactivation.

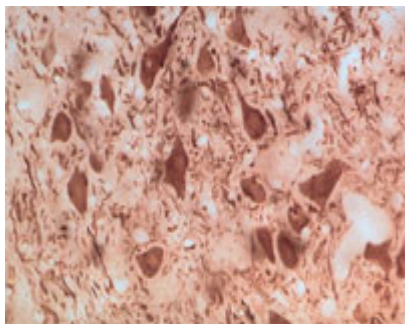
FOR RESEARCH USE ONLY

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3. Tamo W. et al (2007) Parkin is expressed in vascular endothelial cells.
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4. Trimmer P.A. et al (2004) Parkinson's disease transgenic mitochondrial cybrids generate Lewy inclusion bodies.
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7. Horowitz J.M. et al (2001) Spatial distribution, cellular integration and stage development of Parkin protein in Xenopus brain
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References:

1. Hottori et al. (1998) Biochem Biophys Res Commun. 249 (3): 754-758
2. Kitada et al. (1998). Nature. 392: 605-608



Immunohistochemical staining of parkin in rat brainstem using rabbit polyclonal antibody to human parkin, catalogue number R-113-100. Trigeminal motor neurons are intensely stained.

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