10320 Camino Santa Fe, Suite G
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Phospho-Ser378 Parkin Antibody

Affinity purified rabbit polyclonal antibody
Catalog # AN1133

Specification

Phospho-Ser378 Parkin Antibody - Product Information

Application	**WB**
Primary Accession	O60260
Reactivity	**Human**
Host	**Rabbit**
Clonality	**polyclonal**
Calculated MW	**52 KDa**

Phospho-Ser378 Parkin Antibody - Additional Information

Gene ID	**5071**
Gene Name	**PARK2**

Other Names
E3 ubiquitin-protein ligase parkin, 632-, Parkinson juvenile disease protein 2, Parkinson disease protein 2, PARK2, PRKN

Target/Specificity
Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser378 conjugated to KLH.

Dilution
WB~~ 1:1000

Format
Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

Antibody Specificity
Specific for the ~52k parkin protein phosphorylated at Ser378. Immunolabeling of the parkin band is absent in parkin S378 mutants.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Phospho-Ser378 Parkin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

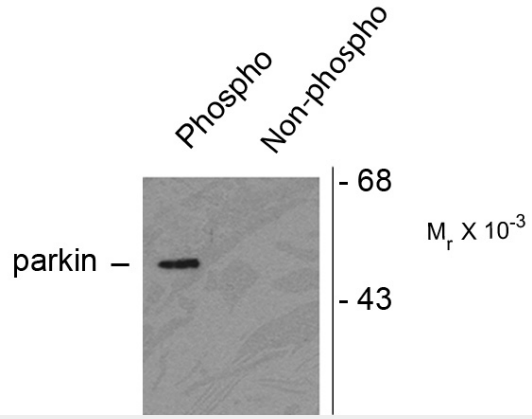
Phospho-Ser378 Parkin Antibody - Protocols

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Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phospho-Ser378 Parkin Antibody - Images



Western blot of HEK293 cells transfected with Parkin WT (Phospho) and Parkin S378 mutant (non-phospho) showing the phospho-specific immunolabeling of the ~ 52 k parkin protein. The immunolabeling is absent in the parkin S378 mutant.

Phospho-Ser378 Parkin Antibody - Background

Parkin is an E3 ligase in the ubiquitin-proteasome system. Hereditary Parkinson's disease is most commonly caused by mutations in the parkin gene and is characterized by the progressive loss of dopaminergic neurons and the presence of Lewy bodies in the substania nigra (Jenner et al.,1992). Recent evidence suggests that phosphorylation of parkin at Ser378 may have an important regulatory role on its E3 ubiquitin ligase activity (Yamamoto et al., 2005).

Phospho-Ser378 Parkin Antibody - References

Jenner P, Dexter DT, Sian J, Schapira AH, Marsden CD (1992) Oxidative stress as a cause of nigral cell death in Parkinson's disease and incidental Lewy body disease. Ann Neurol. 32 Suppl: S82-7.
Yamamoto A, Friedlein A, Imai Y, Takahashi R, Kahle PJ, Haass C (2005) Parkin phosphorylation and modulation of its E# ubiquitin ligase activity. J Biol chem. 280(5):3390-9