abcam

Product datasheet

Anti-Parkin (phospho S101) antibody ab73015

2 References 画像数 1

製品の概要

製品名 Anti-Parkin (phospho S101) antibody

製品の詳細 Rabbit polyclonal to Parkin (phospho S101)

由来種 Rabbit

特異性 ab73015 is specific for the ~52k parkin protein phosphorylated at Ser101. Immunolabeling of the

parkin band is absent in parkin S101 mutants.

アプリケーション **適用あり**: WB

種交差性 交差種: Human

交差が予測される動物種: Cow, Non human primates

10169到701至. COW, NOT Human primates

免疫原 Synthetic peptide corresponding to Human Parkin (phospho S101).

ポジティブ・コントロール HEK293 cells transfected with Parkin WT.

特記事項

Recent evidence suggests that phosphorylation of parkin at Ser101 may have an important

regulatory role on its E3 ubiquitin ligase activity (Yamamoto et al., 2005).

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

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found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

バッファー pH: 7.50

Constituents: 0.01% BSA, 50% Glycerol, 0.87% Sodium chloride, 0.238% HEPES

精製度 Immunogen affinity purified

特記事項(精製) ab73015 is prepared from rabbit serum by affinity purification via sequential chromatography on

phospho- and dephosphopeptide affinity columns.

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一次抗体 備考

Recent evidence suggests that phosphorylation of parkin at Ser101 may have an important

regulatory role on its E3 ubiquitin ligase activity (Yamamoto et al., 2005).

ポリモノ

ポリクローナル

アイソタイプ

lαG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab73015の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		1/1000. Detects a band of approximately 52 kDa (predicted molecular weight: 52 kDa).

ターゲット情報

機能

Functions within a multiprotein E3 ubiquitin ligase complex, catalyzing the covalent attachment of ubiquitin moieties onto substrate proteins, such as BCL2, SYT11, CCNE1, GPR37, STUB1, a 22 kDa O-linked glycosylated isoform of SNCAIP, SEPT5, ZNF746 and AIMP2. Mediates monoubiquitination as well as 'Lys-48'-linked and 'Lys-63'-linked polyubiquitination of substrates depending on the context. Participates in the removal and/or detoxification of abnormally folded or damaged protein by mediating 'Lys-63'-linked polyubiquitination of misfolded proteins such as PARK7: 'Lys-63'-linked polyubiquitinated misfolded proteins are then recognized by HDAC6, leading to their recruitment to aggresomes, followed by degradation. Mediates 'Lys-63'-linked polyubiquitination of SNCAIP, possibly playing a role in Lewy-body formation. Mediates monoubiquitination of BCL2, thereby acting as a positive regulator of autophagy. Promotes the autophagic degradation of dysfunctional depolarized mitochondria. Mediates 'Lys-48'-linked polyubiquitination of ZNF746, followed by degradation of ZNF746 by the proteasome; possibly playing a role in role in regulation of neuron death. Limits the production of reactive oxygen species (ROS). 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.

組織特異性

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. Found in serum (at protein level).

パスウェイ

Protein modification; protein ubiquitination.

関連疾患

Defects in PARK2 are a cause of Parkinson disease (PARK) [MIM:168600]. A complex neurodegenerative disorder characterized by bradykinesia, resting tremor, muscular rigidity and postural instability. Additional features are characteristic postural abnormalities, dysautonomia, dystonic cramps, and dementia. The pathology of Parkinson disease involves the loss of dopaminergic neurons in the substantia nigra and the presence of Lewy bodies (intraneuronal accumulations of aggregated proteins), in surviving neurons in various areas of the brain. The disease is progressive and usually manifests after the age of 50 years, although early-onset

cases (before 50 years) are known. The majority of the cases are sporadic suggesting a multifactorial etiology based on environmental and genetic factors. However, some patients present with a positive family history for the disease. Familial forms of the disease usually begin at earlier ages and are associated with atypical clinical features.

Defects in PARK2 are the cause of Parkinson disease type 2 (PARK2) [MIM:600116]; also known as early-onset parkinsonism with diurnal fluctuation (EPDF) or autosomal recessive juvenile Parkinson disease (PDJ). A neurodegenerative disorder characterized by bradykinesia, rigidity, postural instability, tremor, and onset usually befor 40. It differs from classic Parkinson disease by early DOPA-induced dyskinesia, diurnal fluctuation of the symptoms, sleep benefit, dystonia and hyper-reflexia. Dementia is absent. Pathologically, patients show loss of dopaminergic neurons in the substantia nigra, similar to that seen in Parkinson disease; however, Lewy bodies (intraneuronal accumulations of aggregated proteins) are absent.

Note=Defects in PARK2 may be involved in the development and/or progression of ovarian

cancer.

配列類似性 Belongs to the RBR family. Parkin subfamily.

Contains 1 IBR-type zinc finger. Contains 2 RING-type zinc fingers. Contains 1 ubiquitin-like domain.

ドメイン The ubiquitin-like domain binds the PSMD4 subunit of 26S proteasomes.

翻訳後修飾 Auto-ubiquitinates in an E2-dependent manner leading to its own degradation. Also

polyubiquitinated by RNF41 for proteasomal degradation.

S-nitrosylated. The inhibition of PARK2 ubiquitin E3 ligase activity by S-nitrosylation could contribute to the degenerative process in PD by impairing the ubiquitination of PARK2 $\,$

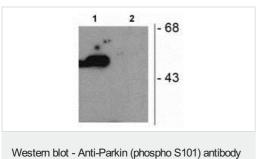
substrates.

細胞内局在 Cytoplasm > cytosol. Nucleus. Endoplasmic reticulum. Mitochondrion. Mainly localizes in the

cytosol. Co-localizes with SYT11 in neutrites. Co-localizes with SNCAIP in brainstem Lewy bodies. Relocates to dysfunctional mitochondria that have lost the mitochondial membrane

potential; recruitement to mitochondria is PINK1-dependent.

画像



(ab73015) (vestern blot - Anti-Parkin (phospho S101) antibody

All lanes : Anti-Parkin (phospho S101) antibody (ab73015) at 1/1000 dilution

Lane 1: HEK293 cells transfected with Parkin WT (phospho)

Lane 2: HEK293 cells transfected with Parkin S101 mutant (non-

phospho)

Predicted band size: 52 kDa **Observed band size:** 52 kDa

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