# abcam

## Product datasheet

# Alexa Fluor® 647 Anti-PARK7/DJ1 antibody [EP2815Y] ab204009

יועדער RabMAb

## 画像数 2

### 製品の概要

製品名 Alexa Fluor® 647 Anti-PARK7/DJ1 antibody [EP2815Y]

製品の詳細 Alexa Fluor® 647 Rabbit monoclonal [EP2815Y] to PARK7/DJ1

由来種 Rabbit

標識 Alexa Fluor® 647. Ex: 652nm. Em: 668nm

アプリケーション 適用あり: ICC/IF 種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat 🔷

免疫原 Synthetic peptide corresponding to Human PARK7/DJ1 (N terminal).

ポジティブ・コントロール ICC/IF: HeLa cells.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

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### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

**バッファー** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

精製度 Protein A purified

**ポリ/モノ** モノクローナル

**クローン名** EP2815Y

アイソタイプ lgG

### アプリケーション

# The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab204009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
ICC/IF		1/200. This product gave a positive signal in HeLa cells fixed with 100% methanol (5 min).

# ターゲット情報

### 機能

Protects cells against oxidative stress and cell death. Plays a role in regulating expression or stability of the mitochondrial uncoupling proteins SLC25A14 and SLC25A27 in dopaminergic neurons of the substantia nigra pars compacta and attenuates the oxidative stress induced by calcium entry into the neurons via L-type channels during pacemaking. Eliminates hydrogen peroxide and protects cells against hydrogen peroxide-induced cell death. May act as an atypical peroxiredoxin-like peroxidase that scavenges hydrogen peroxide. Following removal of a Cterminal peptide, displays protease activity and enhanced cytoprotective action against oxidative stress-induced apoptosis. Stabilizes NFE2L2 by preventing its association with KEAP1 and its subsequent ubiquitination. Binds to OTUD7B and inhibits its deubiquitinating activity. Enhances RELA nuclear translocation. Binds to a number of mRNAs containing multiple copies of GG or CC motifs and partially inhibits their translation but dissociates following oxidative stress. Required for correct mitochondrial morphology and function and for autophagy of dysfunctional mitochondria. Regulates astrocyte inflammatory responses. Acts as a positive regulator of androgen receptordependent transcription. Prevents aggregation of SNCA. Plays a role in fertilization. Has no proteolytic activity. Has cell-growth promoting activity and transforming activity. May function as a redox-sensitive chaperone.

# 組織特異性

Highly expressed in pancreas, kidney, skeletal muscle, liver, testis and heart. Detected at slightly lower levels in placenta and brain. Detected in astrocytes, Sertoli cells, spermatogonia,

spermatids and spermatozoa.

**関連疾患** Defects in PARK7 are the cause of Parkinson disease type 7 (PARK7) [MIM:606324]. A

neurodegenerative disorder characterized by resting tremor, postural tremor, bradykinesia, muscular rigidity, anxiety and psychotic episodes. PARK7 has onset before 40 years, slow progression and initial good response to levodopa. Some patients may show traits reminiscent of

amyotrophic lateral sclerosis-parkinsonism/dementia complex (Guam disease).

**配列類似性** Belongs to the peptidase C56 family.

翻訳後修飾 Sumoylated on Lys-130 by PIAS2 or PIAS4; which is enhanced after ultraviolet irradiation and

essential for cell-growth promoting activity and transforming activity.

Cys-106 is easily oxidized to sulfinic acid.

Undergoes cleavage of a C-terminal peptide and subsequent activation of protease activity in

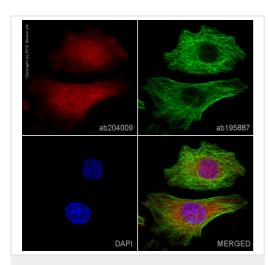
response to oxidative stress.

細胞内局在 Cytoplasm. Nucleus. Mitochondrion. Under normal conditions, located predominantly in the

cytoplasm and, to a lesser extent, in the nucleus and mitochondrion. Translocates to the mitochondrion and subsequently to the nucleus in response to oxidative stress and exerts an increased cytoprotective effect against oxidative damage. Detected in tau inclusions in brains

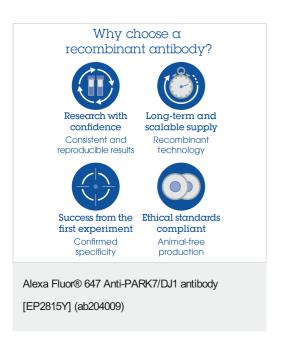
from neurodegenerative disease patients.

### 画像



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 647 Anti-PARK7/DJ1 antibody [EP2815Y] (ab204009) ab204009 staining PARK7/DJ1 in HeLa cells. The cells were fixed with 100% methanol (5min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab204009 at 1/200 dilution (shown in red) and <a href="mailto:ab195887">ab195887</a>, Mouse monoclonal to alpha Tubulin (Alexa Fluor<sup>®</sup> 488), at 1/250 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



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