# abcam

# Product datasheet

# Recombinant Human PARK7/DJ1 protein ab51198

3 References 2 图像

描述

产品名称 重组人PARK7/DJ1蛋白

纯**度** > 95 % SDS-PAGE.

表达系统 Escherichia coli

Accession Q99497

**蛋白长度** Full length protein

无动物成分 No

性质 Recombinant

种属 Human

序列 MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD

KDRWGSMASK RALVILAKGA EEMETVIPVD
VMRRAGIKVT VAGLAGKDPV QCSRDVVICP
DASLEDAKKE GPYDVVVLPG GNLGAQNLSE
SAAVKEILKE QENRKGLIAA ICAGPTALLA
HEIGFGSKVT THPLAKDKMM NGGHYTYSEN
RVEKDGLILT SRGPGTSFEF ALAIVEALNG

KEVAAQVKAP LVLKD

标签 His tag N-Terminus

技术指标

Our Abpromise guarantee covers the use of ab51198 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应**用** SDS-PAGE

Western blot

形式 Liquid

制备和贮存

稳**定性和存储** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

pH: 8.00

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#### 常规信息

#### 功能

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.

### 组织特异性

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.

#### 疾病相关

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).

#### 序列相似性

Belongs to the peptidase C56 family.

## 翻译后修饰

Sumoylated on Lys-130 by PIAS2 or PIAS4; which is enhanced after ultraviolet irradiation and essential for cell-growth promoting activity and transforming activity.

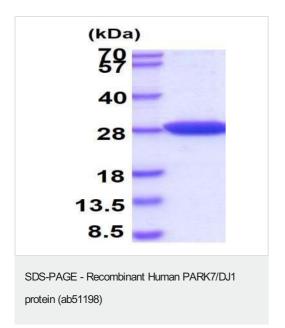
Cys-106 is easily oxidized to sulfinic acid.

Undergoes cleavage of a C-terminal peptide and subsequent activation of protease activity in response to oxidative stress.

#### 细胞定位

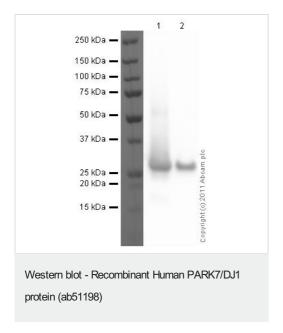
Cytoplasm. Nucleus. Mitochondrion. Under normal conditions, located predominantly in the cytoplasm and, to a lesser extent, in the nucleus and mitochondrion. Translocates to the mitochondrion and subsequently to the nucleus in response to oxidative stress and exerts an increased cytoprotective effect against oxidative damage. Detected in tau inclusions in brains from neurodegenerative disease patients.

#### 图片



15% SDS-PAGE gel loaded with ab51198, recombinant human PARK7/DJ1 protein (His tag).

Predicted molecular weight 24 kDa.



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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