# abcam

### **Product datasheet**

## Parkin overexpression 293T lysate (whole cell) ab94077

2 图像

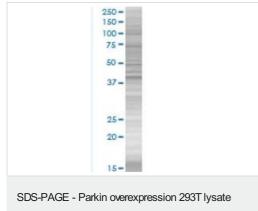
概述			
产品名称	Parkin overexpression 293T裂解物(whole cell) ab94077 is a 293T cell transfected lysate in which Human Parkin has been transiently over- expressed using a pCMV-Parkin plasmid. The lysate is provided in 1X Sample Buffer. 适用于: WB		
<b>常</b> 规说 <b>明</b>			
经 <b>测</b> 试应 <b>用</b>			
性能			
Mycoplasma free	Yes		
形式	Liquid		
<b>存放</b> 说明	Shipped on dry ice. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.		
存储溶液	Constituents: 0.01% Bromophenol blue, 2.3% Beta mercaptoethanol, 2% Sodium lauryl sulfate, 0.788% Tris HCl, 10% Glycerol (glycerin, glycerine)		
背景	Function: 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 SNCAIP, possibly playing a role in Lewy-body formation. Mediates monoubiquitination of SNCAIP, possibly playing of Directondria. 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-dependen exocytosis. Regulates cyclin-E during neuronal apoptosis. May represent a tumor suppressor gene. 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. Found in serum (at protein level). Pathway: Protein modification; protein ubiquitination. Disease: 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 DOPAinduced 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. Similarity: Belongs to the RBR family. Parkin subfamily. Contains 1 IBR-type zinc finger. Contains 2 RING-type zinc fingers. Contains 1 ubiguitin-like domain. Domain: The ubiguitin-like domain binds the PSMD4 subunit of 26S proteasomes. PTM: Auto-ubiquitinates in an E2-dependent manner leading to its own degradation. Also polyubiguitinated by RNF41 for proteasomal degradation. S-nitrosylated. The inhibition of PARK2 ubiguitin E3 ligase activity by S-nitrosylation could contribute to the degenerative process in PD by impairing the ubiquitination of PARK2 substrates.

#### 应用

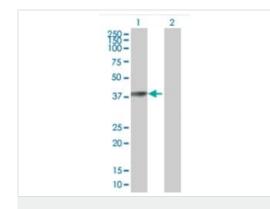
The Abpromise guarantee Abpromise™承诺保证使用ab94077于以下的经测试应用 "应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use at an assay dependent dilution.



(whole cell) (ab94077)

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Western blot - Parkin overexpression 293T lysate

ab94077 at 15µg/lane on an SDS-PAGE gel.

All lanes : Anti-Parkin antibody (<u>ab55488</u>) at 1/500 dilution Lane 1 : Parkin 293T Transfected Lysate - Positive Control (ab94077) Lane 2 : 293T non-transfected lysate Lysates/proteins at 25 µg per lane.

Secondary

**All lanes :** Goat Anti-mouse IgG (H and L) HRP conjugated at 1/2500 dilution

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