

Immunotag™ PARK7 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT3592
Product Description	Immunotag™ PARK7 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	PARK7
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,IF,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse
Host Species	Rabbit
Immunogen	The antiserum was produced against synthesized peptide derived from human DJ-1. AA range:21-70
Specificity	PARK7 Polyclonal Antibody detects endogenous levels of PARK7 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	PARK7
Accession No.	Q99497 Q99LX0
Alternate Names	PARK7; Protein DJ-1; Oncogene DJ1; Parkinson disease protein 7

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Description	Parkinsonism associated deglycase(PARK7) Homo sapiens The product of this gene belongs to the peptidase C56 family of proteins. It acts as a positive regulator of androgen receptor-dependent transcription. It may also function as a redox-sensitive chaperone, as a sensor for oxidative stress, and it apparently protects neurons against oxidative stress and cell death. Defects in this gene are the cause of autosomal recessive early-onset Parkinson disease 7. Two transcript variants encoding the same protein have been identified for this gene. [provided by RefSeq, Jul 2008],
Cell Pathway/ Category	Parkinson's disease,
Protein Expression	Brain,Cajal-Retzius cell,Cervix,Cervix carcinoma,Fetal brain cortex
Subcellular Localization	chromatin,nucleus,cytoplasm,mitochondrion,mitochondrial respiratory chain complex I,mitochondrial intermembrane space,mitochondrial matrix,endoplasmic reticulum,cytosol,plasma membrane,cell-cell adherens junction,

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Protein Function	disease:Defects in PARK7 are the cause of autosomal recessive early-onset Parkinson disease 7 (PARK7) [MIM:606324, 168600]. Parkinson disease (PD) is a complex, multifactorial disorder that typically manifests after the age of 50 years, although early-onset cases (before 50 years) are known. PD generally arises as a sporadic condition but is occasionally inherited as a simple mendelian trait. Although sporadic and familial PD are very similar, inherited forms of the disease usually begin at earlier ages and are associated with atypical clinical features. PD is characterized by bradykinesia, resting tremor, muscular rigidity and postural instability, as well as by a clinically significant response to treatment with levodopa. The pathology 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. PARK7 is characterized by onset before 40 years, slow progression and initial good response to levodopa.,disease:Defects in PARK7 influences susceptibility to amyotrophic lateral sclerosis-parkinsonism/dementia complex type 2 [MIM:105500]; also called amyotrophic lateral sclerosis-parkinsonism/dementia complex of Guam or Guam disease. Amyotrophic lateral sclerosis-parkinsonism/dementia complex type 2 is a neurodegenerative disorder with unusually high incidence among the Chamorro people of the Western Pacific Islands of Guam. Both amyotrophic lateral sclerosis and parkinsonism-dementia are chronic, progressive, and uniformly fatal disorders in this population. Both diseases are known to occur in the same kindred, the same sibship, and even the same individual.,function:Acts as a positive regulator of androgen receptor-dependent transcription. May function as a redox-sensitive chaperone and as a sensor for oxidative stress. Prevents aggregation of SNCA. Protects neurons against oxidative stress and cell death. Plays a role in fertilization. Has no proteolytic activity. Has cell-growth promoting activity and transforming activity.,induction:By ultraviolet irradiation.,miscellaneous:Cys-106 is easily oxidized to sulfinic acid.,online information:The Singapore human mutation and polymorphism database,PTM:Sumoylated on Lys-130 by PIAS2 or PIAS4; which is enhanced after ultraviolet irradiation and essential for cell-growth promoting activity and transforming activity.,similarity:Belongs to the peptidase C56 family.,subcellular location:Associated with mitochondria in some cells, particularly after oxidative stress. Detected in tau inclusions in brains from neurodegenerative disease patients.,subunit:Homodimer. Binds EFCAB6/DJBP and PIAS2. Part of a ternary complex containing PARK7, EFCAB6/DJBP and AR.,tissue specificity: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.,
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