



Recombinant Protein Technical Manual

Recombinant Human PARK7/DJ Protein (His Tag)

RPES4963

Product Data:

Product SKU: RPES4963

Size: 50µg

Species: Human

Expression host: E. coli

Uniprot: Q99497

Protein Information:

Molecular Mass: 21.3 kDa

AP Molecular Mass: 25 kDa

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 20mM Tris, 150mM NaCl, 3mM DTT, 5% glycerol, pH 8.0

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: DJ;DJ1;HEL-S-67p

Immunogen Information:

Sequence: Met 1-Asp 189

Background:

Parkinson's disease locus DJ (PARK7) is a differentially expressed transcript. DJ plays a physiologic role in protection of erythroid cells from oxidant damage, a function unmasked in the context of oxidative stress. PARK7 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. Mutations in the DJ gene are associated with rare forms of autosomal recessive early-onset Parkinson's disease (PD). DJ/p53 interactions contribute to apoptosis resistance in clonal myeloid cells and may serve as a prognostic marker in patients with myelodysplastic syndromes (MDS). DJ regulates redox signaling kinase pathways and acts as a transcriptional regulator of antioxidative gene batteries. Therefore, DJ is an important redox-reactive signaling intermediate controlling oxidative stress after ischemia, upon neuroinflammation, and during age-related neurodegenerative processes. Augmenting DJ activity might provide novel approaches to treating chronic neurodegenerative illnesses such as Parkinson's disease and acute damage such as stroke.