Product Name: Parkin

Alternate Names: PARK2

Product Code: TE3-033

FOR RESEARCH USE ONLY (RUO)

Verified Applications / Usage

For use in *in vitro* E3 ubiquitin ligase activity assays. Activity may be confirmed by Parkin auto-ubiquitylation in the presence of E1, E2, ubiquitin, ATP, and phospho-ubiquitin/PINK1-dependent activation, with ubiquitylated species detected by Western blot.

Physical Characteristics

Species: Human

Predicted MW (kDa): 52 kDa

Source: Sf9 (*S. frugiperda*)

Purity: 90 %

Tag: Untagged

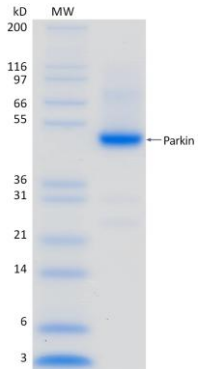
Formulation: 40 mM HEPES, 200 mM NaCl, 10% Glycerol, 1 mM EDTA, 2 mM TCEP, pH 7.6

Shipping: The product is shipped with dry ice. Upon receipt, store it immediately at the temperature recommended below.

Stability/Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles. Aliquot and store ≤ -70°C (stable for 24 months from date of receipt).

Quality Assurance

Purity & SDS-PAGE



2 µg Parkin run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Protein ID: E3 ubiquitin-protein ligase parkin

Activity Assay

Verified in Ubiquitylation Assay with phospho-Ubiquitin and PINK1.

Background

Description

Parkin is a disease-relevant E3 ubiquitin ligase that regulates mitochondrial quality control and protein degradation pathways. It is widely used in studies of mitophagy, ubiquitin signaling, and Parkinson's disease mechanisms.

Accession Number: O60260

Entrez Gene ID: PARK2

Protein Sequence

GPMIVFVRFNSSHGFPVEVDSDTSIFQLKEVVAKRQGVPADQLRVIFAGKELRNDWTVQNCDL
DQQSIVHIVQRPWRKGQEMNATGGDDPRNAAGGCEREPQSLTRVDLSSSVLPGDSVGLAVILH
TDSRKDSPPAGSPAGRSIYNSFYVYCKGPCQRVQPGKLRVQCSTCRQATLTLTQGPSCWDDVL
IPNRMSGECQSPHCPGTSAEFFFKCGAHPTSDKETSVALHLIATNSRNITCITCTDVRSPVLV
FQCNSRHVICLDCFHLYCVTRLNDRQFVHDPQLGYSLPCVAGCPNSLIKELHHFRILGEEQYN
RYQQYGAEECVLQMGGVLCPRPGCGAGLLPEPDQRKVTCEGGNGLGCGFAFCRECKEAYHEGE
CSAVFEASGTTTQAYRVDERAAEQARWEAASKETIKKTTKPCPRCHVPVEKNGGCMHMKCPQP
QCRLEWCWNCGCEWNRVCMGDHWFDV