

Poly ADP Ribose Glycohydrolase (PARG) Active Protein | PARG active protein

Active Poly ADP Ribose Glycohydrolase (PARG)

CATALOG # AAA162130	HOST 293F cell	APPLICATIONS Activity Assay
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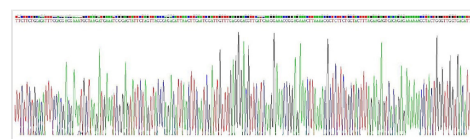
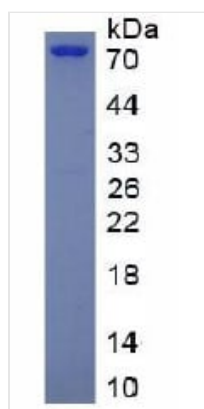
PRODUCT SYNONYMS

Poly ADP Ribose Glycohydrolase (PARG); Active Poly ADP Ribose Glycohydrolase (PARG); PARG active protein

PRODUCT SPECIFICATIONS

Host	293F cell
Purity/Purification	>97%
Concentration	200ug/mL (varies by lot)
Sequence Positions	Ser448~Thr976
Applicable Applications for PARG active protein	Activity Assay
Tag Information	N-terminal His-tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method).
Buffer Formulation	PBS, pH7.4, containing 5% Trehalose.
Predicted Isoelectric Point	6.4
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Avoid repeated freeze/thaw cycles. Store at 2-8oC for one month. Aliquot and store at -80oC for 12 months.

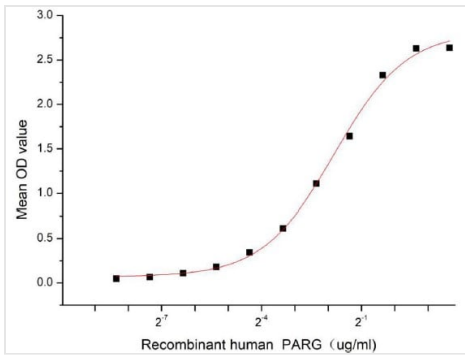
IMAGES



Gene Sequencing
Gene Sequencing (extract)

SDS_PAGE

Sample: Active recombinant PARG, Human



SPD
KKWLGTPIEE MRRMPRCGIR LPLLSPSANH TVTIRVDLLR AGEVPKFPPT
HYKDLWDNKH VKMPCSEQNL YPVEDENGER TAGSRWELIQ TALLNKFTRP
QNLKDAILKY NVAYSKKWF TALIDFWDKV LEEAEAQHLV QSILPDMVKI
ALCLPNICTQ PIPLLKQKMN HSITMSQEIQ ASLLANAFCC TFPRRNAKMK
SEYSSYPDIN FNRLFEGRSS RKPEKLKTLF CYFRRVTEKK PTGLVTFTRQ
SLEDPEWER CEKPLTRLHV TYEGTIEENG QGMLQVDFAN RFVGGGVSTA
GLVQEEIRFL INPELIISRL FTEVLDHNEC LIITGTEQYS EYTGAEYTYR
WSRSHEDGSE RDDWQRRCIE IVAIDALHFR RYLDQFVPEK MRRELNKAYC
GFLRPGVSSE NLSAVATGNW GCGAFGGDAR LKALIQILAA AAAERDVVVF
TFGSELMRD IYSMHIFLTE RKLTVDGVYK LLLRYNNEEC RNCSTPGPDI
KLYPFIYHAV ESCAETADHS GQRTGT

Sequence

Bioactivity

Poly ADP Ribose Glycohydrolase (PARG) is a primary hydrolase involved in the degradation of poly(ADP-ribose) (PAR). It possesses both endo-glycohydrolase and exo-glycohydrolase activity, with a preference for the latter by binding to the two most distal ADP-ribose residues within the PAR chain. These enzymatic actions produce either free PAR or mono ADP-ribose moieties, respectively. The liberated mono ADP-ribose is further metabolized into AMP and ribose 5'phosphate by enzymes such as the NUDIX family. PARG thus plays a crucial role in regulating PAR levels, which are involved in various cellular processes including DNA damage response, chromatin maintenance, and DNA replication. Besides, Activating Transcription Factor 6 (ATF6) has been identified as an interactor of PARG, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human PARG and recombinant human ATF6. Briefly, biotin-linked PARG were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100µl were then transferred to ATF6-coated microtiter wells and incubated for 1h at 37 °C. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µl stop solution to the wells and read at 450nm immediately. The binding activity of PARG and ATF6 was shown in Figure 1, the EC50 for this effect is 0.28ug/mL.

NCBI AND UNIPROT INFORMATION

Molecular Weight

Predicted Molecular Mass: 62.7kDa. Accurate Molecular Mass: 70kDa as determined by SDS-PAGE reducing conditions.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/293f-active-protein/poly-adp-ribose-glycohydrolase-parg/162130>