

Recombinant Human Poly [ADP-ribose] polymerase 1(PARP11),partial

Catalog No: #AP70619

Package Size: #AP70619-1 20ug #AP70619-2 100ug #AP70619-3 1mg

Description

Product Name	Recombinant Human Poly [ADP-ribose] polymerase 1(PARP11),partial
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:2-331aaSequence Info:Partial
Other Names	ADP-ribosyltransferase diphtheria toxin-like 1 ;ARTD1NAD(+) ADP-ribosyltransferase 1 ;ADPRT 1;Poly[ADP-ribose] synthase 1
Accession No.	Q9NR21
Calculated MW	41 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	FHKAEEELFSKTTNNEVDDMDTSDTQGWGFYLAECGKWHMFQPDNSQCSVSSDIEKSFKTNPCGSISFTTS KFSYKIDFAEMKQMNLTGKQRLIKRAPFSISAFSYICENEAIPMPHWENVNTQVPYQLIPLHNQTHEYNEVA NLFGKTMDRNRIKRIQRIQNLDLWEFFCRKKAQLKKRGVPPQINEQMLFHGTSSEFVEAICIHNFDRWINGIHG AVFGKGTYFARDAAYSSRFCKDDIKHGNTFQIHGVSLQQRHLFRTYKSMFLARVLIGDYINGDSKYMRPPSKD GSYVNLYDSCVDDTWNPKIFVVFDDANQIYPEYLIDFH
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Involved in the base excision repair (BER) pathway, by catalyzing the poly(ADP-ribosyl)ation of a limited number of acceptor proteins involved in chromatin architecture and in DNA metabolism. This modification follows DNA damages and appears as an obligatory step in a detection,signaling pathway leading to the reparation of DNA strand breaks. Mediates the poly(ADP-ribosyl)ation of APLF and CHFR. Positively regulates the transcription of MTUS1 and negatively regulates the transcription of MTUS2,TIP150. With EEF1A1 and TXK, forms a complex that acts as a T-helper 1 (Th1) cell-specific transcription factor and binds the promoter of IFN-gamma to directly regulate its transcription, and is thus involved importantly in Th1 cytokine production. Required for PARP9 and DTX3L recruitment to DNA damage sites. PARP1-dependent PARP9-DTX3L-mediated ubiquitination promotes the rapid and specific recruitment of 53BP1,TP53BP1, UIMC1,RAP80, and BRCA1 to DNA damage sites.

References

NIEHS SNPs programThe DNA sequence and biological annotation of human chromosome 1.Gregory S.G., Barlow K.F., McLay K.E., Kaul R., Swarbreck D., Dunham A., Scott C.E., Howe K.L., Woodfine K., Spencer C.C.A., Jones M.C., Gillson C., Searle S., Zhou Y., Kokocinski F., McDonald L., Evans R., Phillips K. , Atkinson A., Cooper R., Jones C., Hall R.E., Andrews T.D., Lloyd C., Ainscough R., Almeida J.P., Ambrose K.D., Anderson F., Andrew R.W., Ashwell R.I.S., Aubin K., Babbage A.K., Bagguley C.L., Bailey J., Beasley H., Bethel G., Bird C.P., Bray-Allen S., Brown J.Y., Brown A.J., Buckley D., Burton J., Bye J., Carder C., Chapman J.C., Clark S.Y., Clarke G., Clee C., Cobley V., Collier R.E., Corby N., Coville G.J., Davies J.,

Deadman R., Dunn M., Earthrowl M., Ellington A.G., Errington H., Frankish A., Frankland J., French L., Garner P., Garnett J., Gay L., Ghori M.R.J., Gibson R., Gilby L.M., Gillett W., Glithero R.J., Grafham D.V., Griffiths C., Griffiths-Jones S., Grocock R., Hammond S., Harrison E.S.I., Hart E., Haugen E., Heath P.D., Holmes S., Holt K., Howden P.J., Hunt A.R., Hunt S.E., Hunter G., Isherwood J., James R., Johnson C., Johnson D., Joy A., Kay M., Kershaw J.K., Kibukawa M., Kimberley A.M., King A., Knights A.J., Lad H., Laird G., Lawlor S., Leongamornlert D.A., Lloyd D.M., Loveland J., Lovell J., Lush M.J., Lyne R., Martin S., Mashreghi-Mohammadi M., Matthews L., Matthews N.S.W., McLaren S., Milne S., Mistry S., Moore M.J.F., Nickerson T., O'Dell C.N., Oliver K., Palmeiri A., Palmer S.A., Parker A., Patel D., Pearce A.V., Peck A.I., Pelan S., Phelps K., Phillimore B.J., Plumb R., Rajan J., Raymond C., Rouse G., Saenphimmachak C., Sehra H.K., Sheridan E., Shownkeen R., Sims S., Skuce C.D., Smith M., Steward C., Subramanian S., Sycamore N., Tracey A., Tromans A., Van Helmond Z., Wall M., Wallis J.M., White S., Whitehead S.L., Wilkinson J.E., Willey D.L., Williams H., Wilming L., Wray P.W., Wu Z., Coulson A., Vaudin M., Sulston J.E., Durbin R.M., Hubbard T., Wooster R., Dunham I., Carter N.P., McVean G., Ross M.T., Harrow J., Olson M.V., Beck S., Rogers J., Bentley D.R. Nature 441:315-321(2006) Research Topic: Epigenetics and Nuclear Signaling

Note: This product is for in vitro research use only and is not intended for use in humans or animals.