

Product datasheet for AR09325PU-N

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

CN: techsupport@origene.cn

OriGene Technologies, Inc.

FEN1 / RAD2 (1-380) Human Protein

Product data:

Product Type: Recombinant Proteins

Description: FEN1 / RAD2 (1-380) human recombinant protein, 0.1 mg

Species: Human
Expression Host: E. coli

Expression cDNA Clone

or AA Sequence:

MGIQGLAKLI ADVAPSAIRE NDIKSYFGRK VAIDASMSIY QFLIAVRQGG DVLQNEEGET TSHLMGMFYR TIRMMENGIK PVYVFDGKPP QLKSGELAKR SERRAEAEKQ LQQAQAAGAE

QEVEKFTKRL VKVTKQHNDE CKHLLSLMGI PYLDAPSEAE ASCAALVKAG KVYAAATEDM

DCLTFGSPVL MRHLTASEAK KLPIQEFHLS RILQELGLNQ EQFVDLCILL GSDYCESIRG IGPKRAVDLI

QKHKSIEEIV RRLDPNKYPV PENWLHKEAH QLFLEPEVLD PESVELKWSE PNEEELIKFM CGEKQFSEER IRSGVKRLSK SRQGSTQGRL DDFFKVTGSL SSAKRKEPEP KGSTKKKAKT

GAAGKFKRGK

Predicted MW: 42.5 kDa

Concentration: lot specific

Purity: >90% by SDS - PAGE

Buffer: Presentation State: Purified

State: Liquid purified protein

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT, 10% glycerol

Preparation: Liquid purified protein

Protein Description: Recombinant human FEN-1 protein was expressed in E.coli and purified by using

conventional chromatography techniques.

Storage: Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

RefSeq: <u>NP 004102</u>

Locus ID: 2237

UniProt ID: <u>P39748, Q6FHX6</u>

Cytogenetics: 11q12.2

Synonyms: FEN-1; MF1; RAD2





Summary:

The protein encoded by this gene removes 5' overhanging flaps in DNA repair and processes the 5' ends of Okazaki fragments in lagging strand DNA synthesis. Direct physical interaction between this protein and AP endonuclease 1 during long-patch base excision repair provides coordinated loading of the proteins onto the substrate, thus passing the substrate from one enzyme to another. The protein is a member of the XPG/RAD2 endonuclease family and is one of ten proteins essential for cell-free DNA replication. DNA secondary structure can inhibit flap processing at certain trinucleotide repeats in a length-dependent manner by concealing the 5' end of the flap that is necessary for both binding and cleavage by the protein encoded by this gene. Therefore, secondary structure can deter the protective function of this protein, leading to site-specific trinucleotide expansions. [provided by RefSeq, Jul 2008]

Protein Families: Druggable Genome, Stem cell - Pluripotency

Protein Pathways: Base excision repair, DNA replication, Non-homologous end-joining

Product images:

