

## Product datasheet for **CF802764**

### **FEN1 Mouse Monoclonal Antibody [Clone ID: OTI3A8]**

#### **Product data:**

<b>Product Type:</b>	Primary Antibodies
<b>Clone Name:</b>	OTI3A8
<b>Applications:</b>	IHC, WB
<b>Recommended Dilution:</b>	WB 1:2000, IHC 1:150
<b>Reactivity:</b>	Human, Mouse, Rat
<b>Host:</b>	Mouse
<b>Isotype:</b>	IgG1
<b>Clonality:</b>	Monoclonal
<b>Immunogen:</b>	Human recombinant protein fragment corresponding to amino acids 117-380 of human FEN1 (NP_004102) produced in E.coli.
<b>Formulation:</b>	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
<b>Reconstitution Method:</b>	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
<b>Purification:</b>	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store at -20°C as received.
<b>Stability:</b>	Stable for 12 months from date of receipt.
<b>Predicted Protein Size:</b>	42.4 kDa
<b>Gene Name:</b>	flap structure-specific endonuclease 1
<b>Database Link:</b>	<a href="#">NP_004102</a> <a href="#">Entrez Gene 14156 Mouse</a> <a href="#">Entrez Gene 84490 Rat</a> <a href="#">Entrez Gene 2237 Human</a> <a href="#">P39748</a>



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**Background:**

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]

**Synonyms:**

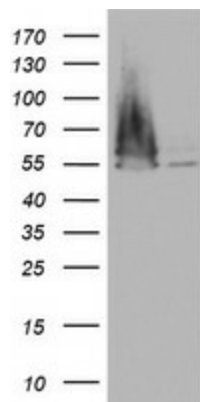
FEN-1; MF1; RAD2

**Protein Families:**

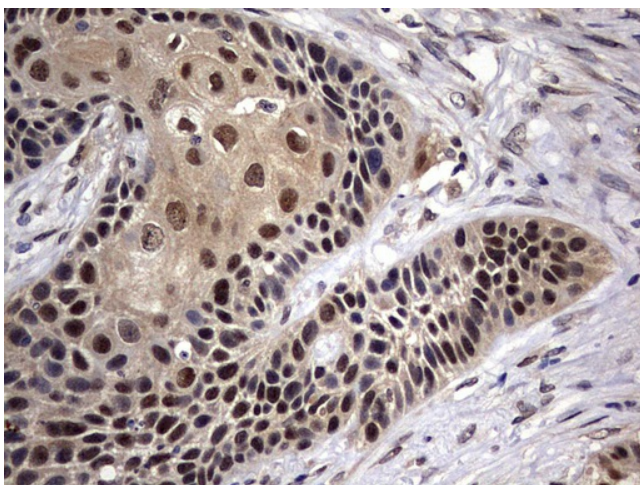
Druggable Genome, Stem cell - Pluripotency

**Protein Pathways:**

Base excision repair, DNA replication, Non-homologous end-joining

**Product images:**

HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY FEN1 [RC201785], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-FEN1. Positive lysates [LY401328] (100ug) and [LC401328] (20ug) can be purchased separately from OriGene.



Immunohistochemical staining of paraffin-embedded Carcinoma of Human lung tissue using anti-FEN1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.