



Mouse anti-Human FEN1 monoclonal antibody, clone 2F3 (CABT-B10259)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

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| Immunogen | FEN1 (NP_004102, 1 a.a. ~ 111 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. |
| Isotype | IgM |
| Source/Host | Mouse |
| Species Reactivity | Human |
| Clone | 2F3 |
| Conjugate | Unconjugated |
| Applications | WB, ELISA |
| Sequence Similarities | MGIQGLAKLIADVAPSAIRENDIKSYFGRKVAIDASMSIQFLIAVRQGGDVLQNEEGET TSHLMGMFYRTIRMMENGKIPVYVFDGKPPQLKSGELAKRSERRAEAEKQ* |
| Format | Liquid |
| Size | 200 µl |
| Buffer | In ascites fluid |
| Storage | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing. |

BACKGROUND

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| Introduction | 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 |
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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]

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| Keywords | FEN1; flap structure-specific endonuclease 1; MF1; RAD2; FEN-1; flap endonuclease 1; FEN-1; DNase IV; maturation factor 1; maturation factor-1; |
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GENE INFORMATION

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| Entrez Gene ID | 2237 |
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| UniProt ID | Q6FHX6 |
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| Pathway | Base Excision Repair, organism-specific biosystem; Base excision repair, organism-specific biosystem; Base excision repair, conserved biosystem; Cell Cycle, Mitotic, organism-specific biosystem; Chromosome Maintenance, organism-specific biosystem; DNA Repair, organism-specific biosystem |
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| Function | 5'-3' exonuclease activity; 5'-3' exonuclease activity; 5'-flap endonuclease activity; 5'-flap endonuclease activity; 5'-flap endonuclease activity; 5'-flap endonuclease activity; DNA binding; DNA binding; catalytic activity; damaged DNA binding; double-stranded DNA binding; double-stranded DNA specific exodeoxyribonuclease activity; endonuclease activity; exonuclease activity; magnesium ion binding; manganese ion binding; protein binding; ribonuclease H activity |
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