

## Product datasheet for **RN215610**

### Fancd2 (NM\_001001719) Rat Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Fancd2 (NM\_001001719) Rat Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Fancd2  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >RN215610 representing NM\_001001719  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGTCAAATGGTTTCCAAAAGAAGTCGGTTAGATTTGAGGATAAAGAAACCCTGGCAGAAGATGCCT  
CCAAAATCATGAAGCAACCCCTTCCAAGTTGGCAAAGAAGCTTGTGGTTCTCATGAAGTTGAAGAAA  
TGGCAGTGTTTTTGTAAGGCTTCTAAGGCGTCAGGACTCACTCTGAAAACCTGGAGACAACCAAAATCAG  
CTAGGTGTGGATCAGATAATCTTCCAAAAGGAAGCTCTTTCAGGCCTTGAGGAAGCATCCTTCTATCCCA  
AAGTAATAGAAGAATTTGTTAATGGCCTGGAGTCTACACTGAGGACATTGACAGTCTCAGGAACCTGCCT  
GCTGTCTGTGAGCGCCTGCAGGATGAGGAAGCCAGCATGGGCACATTTACTCCAAGAGTCTGATCAAG  
CTTCTTCTGGGGATTGACATTTTGCAGCCTGCCATTATCAAAATGCTATTTGAAAAGTGGCACAGTTTC  
TTTTTGAAAGCGAGAGCAGAGATGGGATCAGCATGCCCGACTCATCAGTCAGCTAAAGTGGCTGGA  
TAGAATCGTGGACAGCAAGGACCTCACACCCAGATGATGCAGTTGATCAGTGTGCTCCAGTGAATTTA  
CAACATGACTTCATCACTAGCCTCCTGAGATCCTAGGGGATCCAGCATGCTAATGTGGGAAAGAGC  
TCAGTGAGCTGCTGGTGCAGAATACTTCACTGACTGTTCCGATCTGGATGTCTTTCCAGTCTCCGACT  
TGACCCAAACTTCTGTCTGAGATCCGCCAGTTGGTGATGGGCAAGCTGTCATCTGTCCGTCTAGAGGAC  
TTACCTGTGATAGTAAAGTTCATTCTTCTTCTGTGACAGACAGCACTTCACTAGAGGTGATTGCTGAGC  
TGCGGGAGAAGTTGAACGTCCAGCATTTTACCTTGCCGTCACGAATTCAGGCTTCCCAAAGCAAGTTGAA  
AAGTAAAGGATTAGCAAGCTCTTCAGGAAATCAAGAAAACAGTGATAAAGACTGTATTGTTCTCCTCTTT  
GATGTAATAAAGTCAGCCATTAGATACGAGAAAACCATTCAGAAGCCTGGATCAAGGCAATTGAACGCA  
TTCAGTCAGCGGCTGAACATAAGGCTTGGACGTGGCAATGTTGCTCATCATCTATGGAACAGCACTCA  
GACAAAGAAGGGCGTTGAGAGGCTTCTGAGAAAACAAGATTCAGTCAGACTGCATTCAAGAACAGCTCCTT  
GACAGTACGTTCTACACATTGCTTGGTTCTTAAGGATATTTGCCCATCTATCCTTCTGCTGGCTCAGA  
CTTTGTTTCACTCCCAAGACCAGAGGATAATTTTGTGGCAGTCTTCTATGCAAAATATGCCTTTAAGTT  
TTTTGATACCTACTGCCAGCAGGAAGTGGTTGGTCTTTAGTAACCCATGTATGCAAGTGGGAATGAGGCT  
GAAGTTGATGCTGCATTAGATGCTCCTGAGGCTGATTGTGCTAAACGCCTCTGCCATGAGGCTCAACG  
CTGCTTTTATTAAGGGCATTAGATTATTTGGAAAATATGTCCTTCAACAAAATACGAAAAATCTTCTG  
TATTCTCAGCACTTAGCATTTAGCCAACAGCCCGGAACAGCAACCATATCCAGGATGACATGCACCTG



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GTGATCCGGAAGCAGCTCTCTAGCACTGTGTTCAAGTACAAACTCATTGGGATCATCGGTGCAGTCACCA  
 TGGCCGGCATCATGGCAGAAGACAGAATATGCCATCTAATTC AACCCAGAGGAGCGCCAGTGTGAGCAG  
 TGAACAGCACACACAGGTGACTTCTTTGTTACAACCTGGTTCATTCTGCACCCGAACACTCTCCTTGGGCC  
 TCTTCTCTTTATTATGATGAATTTGCCAACCTCATCCAAGAAAGAAAGTTGGCTCCAAAAACCTTGGAA  
 GGGTTGCTCAGACGATCTTTAATGATTTCCAAGATGCCTTTGTGGTGGACTTCTGTGCTGTTCCAGAAGG  
 TGACTTTCCATTTCTGTGAAAGCGCTCTATGGACTGGAAGAATGCAACACTCAAGATGGCATTGTCATC  
 AACCTCTGCCACTGTTCTTTTCAGGAATTTGCAAAAGATGTCAGTCAAGTGAATCACAAGATCAAGC  
 AGAAATCAATGTCTCCTTTGTGCCTGGCTTCCCATTTCCGGCTGCTGAGACTTTGGGTGGCAAGACAACA  
 TAACGGAAACTTGGATGAGATCGATGCTCTCTTAGATTGTCCCCTGTTCCCTGACCTGGAACCTGGA  
 GAGAACTGGAGTCCATGTCTGTAAAGACCGTCACTCATGTGTTCACTCACATTCTTAACTTTCAACT  
 GGTTCAGAGAGTTGTGAATGCCTTCTGCCAACAACTTCTCCTGAGATGAAGGGCAAGTTCTTAGTCG  
 GCTAAAGGACCTTGTGGAGCTTCAGGAGATCCTAGAGAAGTACTGGCAGTATCCAGACTATGTCCCA  
 CCTTTCACAAGCGTTGACTTGGATACTTATAGTGTGATACCTAGGAGCAATTCTGCTGTTGCTGCAAAAA  
 GCAGACACAAGGGAAGACCGGGGAAAGAAACAGAAAGCTGATAGCAGCACAGCATCCTGCACGGACAC  
 ACTTCTCACAGAAGACACTTCAGAATGTGACGTGGCACCGTCTGGGAAAAGCCAAGTAGACAAGGAGTCT  
 ACAGGGAAGGAAGGAAAGACGTTTGTGTCACTGCAGAATTACCGTCTTCTTCCGAGAGCTGGACATTG  
 AAGTCTTCTCTATTCTGCATTCTGGACTTGTGACCAAGTTCATCTTAGACTGAAATGCACACTGAAGC  
 TACAGAAGTTGTCCAGCTGGGGCCTGCTGAGCTGCTTTTCTTGTGGAAGATCTTCCCAGAAGCTAGAG  
 AATAGACTCACTCCTTCTTTACCAAGAGAGTCTGTTTCTTCAAGAAATAAGGAAGCCGGAATATTGGAT  
 TCTCACATCTTCATCAGAGATCTGTCCAGGACATTGTGCATTGTGTTGTTGTCAGCTGTAACCCCATGTG  
 TAACCATCTGGAGAACATTCACAACCTTCTCCAGTGTCTAGGTGCTGAGAATCTCAGTGTAAATGACAAG  
 GCCAGAGTGACAGCTCAGGAGCACTACACCATGTCTCCTGCTACCAGAAGCTGCTGCAGGTCTTCCATG  
 CACTCTTGGCTTGGAAAGGATTTACTACCAATCAAACCACCGCTCCTGCGCTCAGCCCTTGGAGTCT  
 TGCAGCCGACTGAAGCAGACGGAAGAGGGGACGCCCTTGGAGGAACTGCTCAGCCAGAGCTTCAGTTAC  
 TTGAGAATTTGCAGCACAGCATTCCCAGTTTCCAGTGTGGTCTTTATCTCCTCAGACTTCTGATGGCCC  
 TTCTGGAGAAGTCTGCAGTACCTACCCAGAAGAAAGAAAACTTGCCCTCTGCGCAAACAGCTGCTTTG  
 TCGAGCATGGCCTCATGGGGACAAGAGAAGAACCCCACTTTTAAATGACCACCTCCATGACTTGTCTTGC  
 ATCTACTTGGAGCACACAGACAATGTTCTGAAGGCCATAGAGGAGTACTGGTGTGTTGGTGTCCAGAAC  
 TGGTCAATGCTCCGAAAGATGCCTCCTTCTACATTTCCACGTTGACCAGGCACACCTTTGTCATCTT  
 CTTCCGTGTGATGATGGCTGAATTTGAGAAGACGGTGAAGGTCTTCAGGCTGGCACAGCTACAGATTCC  
 CAGCAGGTTACGAAGAGAAGCTTCTCTATTGGAACATGGCTGTCCGAGACTTCAGCATCCTTATCAATC  
 TGATGAAGGTATTTGACAGTTATCCTGTTCTGCATGTGTGTTAAAGTATGGCCGTCGCTTGTGGAGGC  
 ATTTCTGAAGCAGTGCATGCCGCTCCTCGACTTCACTTTAGAAAAGCATCGGGATGATGTTCTGAGCTTG  
 CTGCAAAACCTTCAGTTGAACACAAGGCTACTTCATCACCTTTGTGGACTCCAAGATTACCAGGACA  
 CAAGACTACCAAACATGTGCCTTACTCAAAAAGTCACTGGAGCTGTTAGTTTGCAGAGTCAAAGCCAT  
 GCTTGTCTCAACAATTTAGAGAGGCTTTCTGGTTGGTACTCTCAAAAACCGAGACTTACAGGGTGAA  
 GAAATTTTCCAGCATCCCTCCTCCCGAAAAACACTTCAGAGGACAGTGAGGATGGCATGACATCCT  
 ATGTCTCCAGGAACAGAGCAATAGAGGATGGGGAAGATGAAGCAAATGATGGACAGGACAGGACAGTGA  
 TGAGAGTGACGACAGCTCCAGTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

SgfI-MluI

ACCN:

NM\_001001719

Insert Size:

4365 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li></ol>
<b>RefSeq:</b>	<u>NM_001001719.1, NP_001001719.1</u>
<b>RefSeq Size:</b>	4365 bp
<b>RefSeq ORF:</b>	4365 bp
<b>Locus ID:</b>	312641
<b>UniProt ID:</b>	<u>Q6IV68</u>
<b>Cytogenetics:</b>	4q42
<b>Gene Summary:</b>	Required for maintenance of chromosomal stability. Promotes accurate and efficient pairing of homologs during meiosis. Involved in the repair of DNA double-strand breaks, both by homologous recombination and single-strand annealing. May participate in S phase and G2 phase checkpoint activation upon DNA damage. Plays a role in preventing breakage and loss of missegregating chromatin at the end of cell division, particularly after replication stress (By similarity). Promotes BRCA2/FANCD1 loading onto damaged chromatin. May also be involved in B-cell immunoglobulin isotype switching (By similarity).[UniProtKB/Swiss-Prot Function]