

Product datasheet for **KN212291**

Folate Binding Protein (FOLR1) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	Folate Binding Protein
Locus ID:	2348
Components:	<p>KN212291G1, Folate Binding Protein gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCTCATGCAACTTGTCTCTCG</p> <p>KN212291G2, Folate Binding Protein gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CATGAACGCCAAGCACCACA</p> <p>KN212291D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; Left arm sequence in blue; GFP-puro in green; Right arm in violet

```

AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGCAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTG TGAGAATAGT GTATGCCGGC
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAACTTT AAAAGTGCTC
ATCATTGGAA AACGTTCTTC GGGGCGAAAA CTCTCAAGGA TCTTACCGCT GTTGAGATCC AGTTTCGATGT
AACCCACTCG TGCACCCAAC TGATCTTCAG CATCTTTTAC TTTCACCAGC GTTTCTGGGT GAGCAAAAAC
AGGAAGGCAA AATGCCGCAA AAAAGGGAAT AAGGGCGACA CGGAAATGTT GAATACTCAT ACTCTTCCTT
TTTCAATATT ATTGAAGCAT TTATCAGGT TATTGTCTCA TGAGCGGATA CATATTTGAA TGTATTTAGA
AAAATAAACA AATAGGGGTT CCGCGCACAT TTCCCCGAAA AGTGCCACCT GACGTCTAAG AAACCATTAT
TATCATGACA TTAACCTATA AAAATAGGCG TATCACGAGG CCCTTTCGGG TCGCGCGTTT CGGTGATGAC
GGTAAAACC TCTGACACAT GCAGCTCCCG TTGACGGTCA CAGCTTGTCT GTAAGCGGAT GCCGGGAGCA
GACAAGCCCG TCAGGGCGCG TCAGCGGGTG TTGGCGGGTG TCGGGGCTGG CTTAACTATG CGGCATCAGA
GCAGATTGTA CTGAGAGTGC ACCATAAAAT TGTAACGTT AATATTTTGT TAAAATTCGC GTTAAATTTT
TGTTAAATCA GCTCATTTTT TAACCAATAG GCCGAAATCG GCAAAATCCC TTATAATCA AAAGAAATAGC
CCGAGATAGG GTTGAGTGTT GTTCCAGTTT GGAACAAGAG TCCACTATTA AAGAACGTGG ACTCCAACGT
CAAAGGGCGA AAAACCGTCT ATCAGGGCGA TGGCCCACTA CGTGAACCAT CACCCAAATC AAGTTTTTTG
GGGTCGAGGT GCCGTAAAGC ACTAAATCGG AACCTAAAG GGAGCCCCCG ATTTAGAGCT TGACGGGGAA
AGCCGGCGAA CGTGCGGAGA AAGGAAGGGA AGAAAGCGAA AGGAGCGGGC GCTAGGGCGC TGGCAAGTGT
AGCGGTCACG CTGCGCGTAA CCACCACACC CGCCGCGCTT AATGCGCCGC TACAGGGCGC GACTATGGT
TGCTTTGACG TATGCGGTGT GAAATACCGC ACAGATGCGT AAGGAGAAAA TACCGCATCA GCGCCATTTC
GCCATTCAGG CTGCGCAACT GTTGGGAAGG GCGATCGGTG CGGGCTCTT CGCTATTACG CCAGCTGGCG
AAAGGGGGAT GTGCTGCAAG GCGATTAAGT TGGGTAACGC CAGGGTTTTT CCAGTCACGA CGTTGTAAAA
CGACGGCCAG TGAATTGGAG GCTACAGTCA GTGGAGAGGA CTTTCACAGG CTGTCGCCGT GCTCATTTGA

```



View online »

TA	ACTGCCCG	TT	ATTCATGC	GAC	CACAGTGC	TGG	GATTACA	GG	CATGAGCC	AC	CGCGCCCA	GCCC	ATTTTT
GT	AACTTTT	ACA	ATGAAGT	AAT	TTGGTGT	CA	AAATCTGA	CCT	GAAAATT	AAT	GTGAGTT	TAT	GTATAGT
TT	TAATTTAT	CCC	ACTAGTG	TA	ACTGTTTC	AC	CCCAAGAT	AT	ACACTTGA	TT	ATTGGGTA	TAT	GAAATTT
AT	ATTTTCTT	TGA	ATCACCT	TT	GATGAAAT	CCT	AAAAAAT	TT	AACCTG	AA	ACATTTGA	ATA	AGGCATT
GT	GGACCTAT	GG	CAACTCC	TGG	CTATTTTC	TGC	ATTTTGC	CCA	ATCCAT	CCT	TGAATTA	TAT	CACCTGA
AC	CTCGTGAC	CAC	CTGGAGA	AG	GCAATGAG	GCT	CAAGCCA	GG	GAGGGGTG	GT	GCTAATC	CT	ACCTTTCA
TT	GGATCTGG	GA	AACTGAG	GG	AGATGGGG	GC	AGGGCTCT	AT	CTGCCCCA	GG	CTTCCGTG	CAG	GCCCCAC
CCT	CTGTGGAG	CC	TGCACAC	AA	CTTAAGGC	CCC	ACCTCCG	CAT	TCTTGG	TGCC	ACTGAC	CAC	AGCTCTT
TCT	TCAGGGA	CAG	ACTAG	CAT	GAGAGC	GAC	GAGAGCG	GC	CTGCCCCG	CAT	GAGATC	GAG	TGCCGCA
TC	ACCGGCAC	CCT	GAACGGC	GT	GAGATTCTG	AG	CTGGTGGG	CG	GCGAGAG	GG	CACCCCG	AG	CAGGGCCG
CAT	GACCAAC	AAG	ATGAAGA	GC	ACCAAGG	CG	CCCTGACC	TT	CAGCCCCT	AC	CTGTGAG	CC	ACGTGATG
GG	TACGGCT	TCT	ACCACTT	CG	CACCTAC	CCC	CAGCGCT	AC	GAGAACCC	CT	TCTGCAC	GCC	ATCAACA
AC	GCGGCTA	CAC	CAACACC	CG	CATCGAGA	AG	TACGAGGA	CG	GCGGCTG	CT	GACGTGA	GCT	TACGTA
CC	GCTACGAG	GCC	GCGCGC	TG	ATCGGCGA	CT	TCAAGGTG	AT	GGGCACCG	GCT	TCCCCGA	GG	ACAGCGTG
AT	CTTCACCG	ACA	AGATCAT	CC	GAGCAAC	GCC	ACCGTGG	AG	CACCTGCA	CCCC	ATGGGC	GATA	ACGATC
TG	GATGGCAG	CT	TACCCGC	AC	TTCAGCC	TG	CGCGACGG	CG	GCTACTAC	AG	CTCCGTGG	TG	GACAGCCA
CAT	GCACTTC	AAG	AGCGCCA	TCC	ACCCAG	CAT	CCTGCA	AAC	GGGGGCC	CC	ATGTTGCG	CT	TCCGCCG
GT	GAGGAGG	AT	CACAGCAA	CAC	CGAGCTG	GG	CATCGTGG	AG	TACCAGCA	CG	CTTCAAG	AC	CCCGGATG
CAG	ATGCCCG	TGA	AGAAAGA	GTT	TAAGAAT	TCC	GATCATA	TT	CAATAACC	CT	TAATATA	CT	TCTGATA
TG	TATGCTAT	AC	GAGTTAT	TAG	GCTGTA	GAG	GAGTTTA	CG	TCCAGCCA	AG	CTTAGGAT	CT	CACCTCG
AA	ATTCTACC	GG	TAGGGGA	GG	CGCTTTTC	CCA	AGGCAGT	CT	GAGCATG	CG	CTTAGCA	GCC	CGCTGG
GC	ACTTGGCG	CT	ACACAAGT	GG	CTCTGGC	CT	CGCACACA	TT	CCACATCC	ACC	GGTAGGC	GCC	AACCGAC
TCC	GTTCTTT	GG	TGGCCCT	TC	GCGCCACC	TT	CTACTCT	CCC	CTAGTCA	GGA	AGTTCCC	CCCC	GCCCCG
CAG	CTCGCGT	CG	TGACGAG	GT	GACAAATG	GAA	GATAGCAC	GT	CTCACTAG	TCT	CGTGCA	AT	GACAGCA
CC	GCTGAGCA	AT	GGAAGCG	GT	AGGCCTTT	GG	GCGAGCG	CCA	ATAGCAG	CT	TGCTCT	TC	GCTTTCTG
GG	CTCAGAGG	CT	GGAAGGG	GT	GGTCCGG	GG	GCGGCTC	AG	GGGCGGG	TC	AGGGCGG	GG	CGGCGGCC
CG	AAGTCTCT	CC	GAGGCC	GG	CATTCTGC	AC	GCTTCAAA	AG	CGCACGTC	TG	CCGCGCTG	TT	CTCTCTT
CCT	CATCTCC	GG	GCCTTCG	AC	CTGCATCC	AT	CTAGATCT	CG	AGCAGCTG	AA	GCTTACCA	TG	ACCGAGTA
CA	AGCCCACG	GT	GCGCTCG	CC	ACCCGCGA	CG	AGTCCCC	AG	GGCCGTAC	GC	ACCCTCG	CG	CCGCTTC
GCC	GACTACC	CC	GCCACGCG	CC	ACACCGTC	GAT	CCGACC	GCC	CATCGA	GCG	GGTCACC	GAG	CTGCAAG
AA	CTTTCTCT	CAC	GCGCGTC	GG	GCTCGACA	TC	GCAAGGT	GT	GGGTCGCG	GAC	GACGGCG	CC	GCGGTGGC
GG	TCTGGACC	AC	GCCGAGA	GC	GTCGAAGC	GG	GCGCGGTG	TT	CGCCGAGA	TC	GCGCCGCG	CAT	GCGCGAG
TT	GAGCGGTT	CCC	GCTGGC	CG	CGCAGCAA	CAG	ATGGAAG	GC	CTCCTGGC	GCC	GACCCG	CCC	AAGGAGC
CC	GCTGTGTT	CCT	TGGCCACC	GT	CGGCGTCT	CG	CCCGACCA	CC	AGGGCAAG	GG	TCTGGGCA	GCG	CCGTCGT
GCT	CCCCGGA	GT	GAGGCGG	CC	GAGCGCG	CG	GGGTGCC	GC	TTCTCTGG	AG	ACCTCCG	GCC	CCACAAC
CT	CCCCTTCT	AC	GAGCGGCT	CG	GCTTACC	GT	CACCGCCG	AC	GTCGAGGT	GCC	CGAAGGA	CC	GCGCACCT
GG	TGCATGAC	CC	GCAAGCCC	GG	TGCCTGAC	GCCC	GCCCCA	CG	ACCCGACG	CG	CCGACCG	AA	AGGAGCGC
AC	GACCCCAT	GC	ATCGATGA	TAT	CAGATCC	CC	GGGATGCA	GAA	ATTGATG	AT	CTATTAAA	CA	ATAAAGAT
GT	CCAATAAA	AT	GGAAGTTT	TT	CCTGTCAT	ACT	TTGTAA	GA	AGGGTGAG	AAC	AGAGTAC	CT	ACATTTTG
AAT	GGAAGGA	TT	GGAGCTAC	GG	GGGTGGGG	GT	GGGTGGG	ATT	AGATAAA	TG	CCTGCTCT	TT	ACTGAAGG
CT	CTTTACTA	TT	GCTTTATG	ATA	ATGTTTC	AT	AGTTGGAT	AT	CATAATTT	AA	ACAAGCAA	AA	CCAAATTA
AG	GCCAGCT	CAT	TCTCCC	ACT	CATGATC	TAT	AGATCTA	TAG	ATCTCTC	GT	GGGATCAT	TG	TTTTTCTC
TT	GATTCCCA	CT	TTGTGGTT	CT	AAGTACTG	TG	TTTTCCAA	AT	GTGTCAGT	TT	CATAGCCT	GA	AGAACGAG
AT	CAGCAGCC	TCT	GTTCCAC	AT	ACACTTCA	TT	CTCAGTAT	TG	TTTTGCCA	AG	TCTAAT	CC	ATCAGAAG
CT	GGTCGAGA	TCC	GGAACCC	TT	AATATAAC	TT	CGTATAAT	GT	ATGCTATA	CG	AAGTTATT	AG	GTCCTCG
AAG	AGTTCA	CT	AGGCGCG	C	ACTGGTCA	G	AAGAGGAA	A	CGAGGACAT	G	AAATGCCA	A	ACCCATTTC
ACT	GGTGAAC	TGA	AGTGGAG	GAG	CCCTTCA	GTT	TGCATTA	AT	ATGGGTGA	CT	ATTTCACA	GAC	ACTGTGC
CAA	ATGTCGG	TACA	ATGCCA	AC	AGTTACC	TT	CTTGGTTG	TT	GAGTTTCC	GC	ATTACAGA	AATA	AGGAAG
CAG	GCCCAA	GG	AGAGCCTG	GGA	AATGAAG	TT	GAGTGAC	CC	ATCCTGGG	GT	TGCTTGAT	TT	AGGGATTT
AG	ACTGGGAA	TG	ACTCTCC	AA	GATCTGA	GG	GAAGAAAC	TG	CACACTGT	GC	ATAGTGGC	CT	CTTTTCTG
CC	AGCCCTAA	AC	AGCTCAAG	AAG	GGAGAGT	CT	CTCACATT	AT	GAGGCTGT	GT	GCAAGCA	TT	CTTTTTTT
TTTT	TCTCTGA	GACA	AAGTCT	CC	ATATGTTG	CCC	AGGCTGG	TCT	CAAATTC	CT	GACTCAA	GT	GATCCTCC

CACCTCAGCC TCCCAAAGTG TGGGATTACA GAAATGAGCC GTACGCCCTC CTGAAGCATC TTGGTTCATG
 CATCTCGCAA AACTTTGGGC TGTGTCTCTC GACCACATTG GACCTGAGGT CTCCTATAA CTCACTCTCG
 CCGTTGGAC TTAGATCAGA AGGGATCTTG CTGCCGCCCG AAAGAGGAAG GGCTGGAAGA GGAAGGAGCT
 TGGCGTAATC ATGGTCATAG CTGTTTCTTG TGTGAAATTG TTATCCGCTC ACAATTCCAC ACAACATACG
 AGCCGGAAGC ATAAAGTGTA AAGCCTGGGG TGCCTAATGA GTGAGCTAAC TCACATTAAT TGCCTTGGCG
 TCACTGCCCG CTTTCCAGTC GGGAAACCTG TCGTGCCAGC TGCATTAATG AATCGGCCAA CGCGCGGGGA
 GAGGCGGTTT GCGTATTGGG CGCTCTTCCG CTTCTCTCGT CACTGACTCG CTGCGCTCGG TCGTTCCGCT
 GCGGCGAGCG GTATCAGCTC ACTCAAAGGC GGTAATACGG TTATCCACAG AATCAGGGGA TAACGCAGGA
 AAGAACATGT GAGCAAAAGG CCAGCAAAAG GCCAGGAACC GTAAAAAGGC CGCGTTGCTG GCGTTTTTCC
 ATAGGCTCCG CCCCCCTGAC GAGCATCACA AAAATCGACG CTCAAGTCAG AGGTGGCGAA ACCCGACAGG
 ACTATAAAGA TACCAGGCGT TTCCCCCTGG AAGCTCCCTC GTGCGCTCTC CTGTTCCGAC CCTGCCGCTT
 ACCGGATACC TGTCCGCTT TCTCCCTTCG GGAAGCGTGG CGCTTTCTCA TAGCTCACGC TGTAGGTATC
 TCAGTTCCGT GTAGGTCGTT CGCTCCAAGC TGGGCTGTGT GCACGAACCC CCCGTTACGC CCGACCGCTG
 CGCCTTATCC GGTAACATC GTCTTGAGTC CAACCCGGTA AGACACGACT TATCGCCACT GGCAGCAGCC
 ACTGGTAAAC GGATTAGCAG AGCGAGGTAT GTAGGCGGTG CTACAGAGTT CTTGAAGTGG TGGCCTAACT
 ACGGCTACAC TAGAAGAACA GTATTTGGTA TCTGCGCTCT GCTGAAGCCA GTTACCTTCG GAAAAAGAGT
 TGGTAGCTCT TGATCCGGCA AACAAACCAC CGCTGGTAGC GGTGGTTTTT TTGTTTGCAA GCAGCAGATT
 ACGGCGAGAA AAAAAGGATC TCAAGAAGAT CCTTTGATCT TTTCTACGGG GTCTGACGCT CAGTGGAACG
 AAAACTCACG TTAAGGGATT TTGGTCATGA GATTATCAAA AAGGATCTTC ACCTAGATCC TTTTAAATTA
 AAAATGAAGT TTAAATCAA TCTAAAGTAT ATATGAGTAA ACTTGGTCTG ACAGTTACCA ATGCTTAATC
 AGTGAGGCAC CTATCTCAGC GATCTGTCTA TTTCGTTTCA CCATAGTTGC CTGACTCCCC GTCGTGTAGA
 TAACTACGAT ACGGGAGGGC TTACCATCTG GCCCAGTGC TGCAATGATA CCGCGAGAAC CACGCTCACC
 GGCTCCAGAT TTATCAGCAA TAAACCAGCC AGCCGGAAGG GCCGAGCGCA GAAGTGGTCC TGCAACTTTA
 TCCGCTCCA TCCAGTCTAT TAATTGTTGC CGGGAAGCTA GAGTAAGTAG TTCGCCAGTT AATAGTTTGC
 GCACGTTGT TGCCATTGCT ACAGGCATCG TGGTGTACG CTCGTCGTTT GGTATGGCTT CATTACGCTC
 CGGTTCCCAA CGATC

GE100003, scramble sequence in pCas-Guide vector

Disclaimer:

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq:

[NM_000802](#), [NM_016724](#), [NM_016725](#), [NM_016729](#), [NM_016730](#), [NM_016731](#)

UniProt ID:

[P15328](#)

Synonyms:

FBP; FOLR

Summary:

The protein encoded by this gene is a member of the folate receptor family. Members of this gene family bind folic acid and its reduced derivatives, and transport 5-methyltetrahydrofolate into cells. This gene product is a secreted protein that either anchors to membranes via a glycosyl-phosphatidylinositol linkage or exists in a soluble form. Mutations in this gene have been associated with neurodegeneration due to cerebral folate transport deficiency. Due to the presence of two promoters, multiple transcription start sites, and alternative splicing, multiple transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Oct 2009]

Product images:

