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Product datasheet for KN519636

Zc3h12a Mouse Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)						
Format:	2 gRNA vectors, 1 linear donor						
Donor DNA:	EF1a-GFP-P2A-Puro						
Symbol:	Zc3h12a						
Locus ID:	230738						
Components:	 KN519636G1, Zc3h12a gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGACAGGCTTCGTTCCACAA KN519636G2, Zc3h12a gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAACACGGTGCTAGGGGAAT KN519636D, Linear donor DNA containing LoxP-EF1A-tGFP-P2A-Puro-LoxP: The sequence below is cassette sequence only. The linear donor DNA also contains proprietary target sequence. LoxP-EF1A-tGFP-P2A-Puro-LoxP (2739 bp) ATAACTTCGT ATAATGTATG CTATACGAAG TTATCGTGAG GCTCCGGTGC CCGTCAGTGG GCAGAGCGCA CATCGCCCAC AGTCCCCGAG AAGTTGGGGG GAGGGGTCGG CAATTGAACC GGTGCCTAGA GAAGGTGGCG CGGGGTAAAC TGGGAAAGTG ATGTCGTGTA CTGGCTCCGC CTTTTTCCCA GGGTGGGGG AGAACGTGAT ATAAGTGCAG TAGTCGCGGT GAACGTTCTT TTTCGCAACG GGTTGCGCG CAGAGCGCACGGGGGAAAC CGGGGCGC GGCCCTCTTA CGGGTTGGA CTGGGGTGGG AGAGTCGAG GCCTGCGGT TAAGTGCCG CTGCGCCT GGCCTCTTA CGGGTTGGA AGTGGGTGGG AGAGTCGAG GCCTGCGGT TAAGGAGCCC CTTCGCCTCG TGCTGGAT CGGGTTGGA AGTGGGTGGG AGAGTCGAG GCCTGCGCT TAAGAGCCC CTTCGCCCCG TGCTGCTT TCGATAAGC CTGGGCCGCG GGCCGCCG GGCGAATCT GGTGGCAGCAC TGCGGCGT CCGCGGCT GCGCTCTTA CGGCAAGATC TGCGCAGGA GCCTGCGCT TAAGAGCCC CTTCGCGCCT TCGCTGCTT TGGATAAGTC TCAAGCATG TGCGCAGG GCCTGCCGG TGCGGACCT TCGCGCCCT GGCGCCCAA AATGGAG GCCCAAGATC TGCGCAGGC GCCCGCG GCCCCGCG GCCCCGCG GCCCCGCG CCGCCCGCG CCGCCCG GCCCCGCG CCGCCCG CCGCCCGG CCGCCCGCG CCGCCCGCG CCGCCCG CCGCCCCG GCCCCCC						
	AGGGCCGCAT GACCAACAAG ATGAAGAGCA CCAAAGGCGC CCTGACCTTC AGCCCCTACC TGCTGAGCCA CGTGATGGGC TACGGCTTCT ACCACTTCGG CACCTACCCC AGCGGCTACG AGAACCCCTT CCTGCACGCC						
	ATCAACAACG GCGGCTACAC CAACACCCGC ATCGAGAAGT ACGAGGACGG CGGCGTGCTG CACGTGAGCT						
	TCAGCTACCG CTACGAGGCC GGCCGCGTGA TCGGCGACTT CAAGGTGATG GGCACCGGCT TCCCCGAGGA						
	CAGCGTGATC TTCACCGACA AGATCATCCG CAGCAACGCC ACCGTGGAGC ACCTGCACCC CATGGGCGAT						



This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Disclaimer:

RefSeq: UniProt ID: Synonyms: Summary:

AACGATCTEG ATGGCAGCTT CACCCGCACC TTCAGCCTGC GGCAGGGGG CTACTACAGC TCCGTGGTGG ACAGCCACAT GCACTTCAGA GGCGCATCC ACCCCACCAT CCTGCAGAC GGGGCCCCA TGTTCGCCTT CCGCGCGCTG GGGGGGAT ACAGCACACC CGCAGCAGC TCGTGGGAT ACCAGCCCCC TTCAAGACC CCGCAGGGC GTACGCAGC CCTAGCCGC AGTACACCG CACGGGTGCG CTCGGCACC CGTCGGACCA CGCGGGCG GTACGCAGCC TCGCCGCGG GTTCGCCGAC TACCCGGCC CGCGCCACC CGTCGGCCC GGCGCCCCCG GTACCGACCG CCGCGCGG GTCGCGCGT CGCGCCCC GGCGCCGG GGCGCCCCCG GTACCGACCG CCGCGCGG GGCGCGGC GGCGCGCG GGCCGCGC GGCGCCCCCG GGCCGCGG GGCGCGCG GGCGCGCG GGCGCGCG GGCCGCGC GGCCGCGG GGCGCCCCCG GGCCCGCG CGCGCTGG CGCGCTGG GGCCGCGG GGCCGCGC GGCCGCGG GGCGCCCCCG GGCCCGCG CGCGCTGG CGCGCCGGC GGCCGCGG GGCCGCGGC GGCCGCGG GGCGCCCCCG GGCACGCCCC CGCCCCGC CGCCCCCC CGCGCGCG								
ACAGCACAT GCACTTCAAG AGCGCATCC ACCCAGCAT CCTGCAGAAC GGGGGCCCA TGTTCGCCTT CCGCGCGGGTG AGGAGGATC ACAGCAACA CGAGCTGGGC ATCGTGGAGT ACCAGCACGC CTTCAAGACC CCGGATGCAG ATGCCCGGTGA AGAAGAGGA AGCGGAGCTA CTAACTTCAG CCTGCTGAAC CAGGCTGGAG ACGTGGAGGA GAACCCTGGA CCTATGACG AGTACAAGCC CACGGTGGGC CTCGCCACC CGGCGAGGT GCCCAGGGCC TACGCACCG CTGCCGCGGC GTTCCCGCGC ACCCCG GCGCCACC CGTCGATCCG GACCGCCAAC TCGAGCGGGT CACCGAGCTG CAAGAACTCT TCCTCACGGC GGTCGGGCCT GACACGGGG GACCGCCAAC GCGACTCGC CCGCGCTGGC GGTCCGCGC GTCCGCCCCC CACACCGGG GACCGCCACG CGGCCTGCC CCGGCTGGC GGTCCCGCG GTCCGCCCCC CACACCGGG GACGCCCCC TGGCGCCCC CCGCGCTGGC GGTCCCCC GGAGTGGAG CGCCCCGGG GCCGCCCTC TGGAGCCCT CCGCCCCCG CGAGTGAGC GGTCCGCCCC GCCCCCGCTG CGGCGCCGC CCGCGCTGCG CACCTGCCC TTCACGAGC GGCCGCGCT CACCGCCG GCCGCCCTC TGGAGCCCT CCGCCCCCC CCTGTGCA GGACGCCGC GGTCGCGCCC GCCGCCCCC TGGAGCCCT CCGCCCCCC ACCTGGTGCA TGCCCCGCAG CGCCCGGGG GCCGCCCTC TGGAGCCCT CCGCCCCCC ACCTGGTGCA TGCCCGCGAG GCCGCCCTC TGGAGCCCT CCGCCCCC ACCTGGTGCA TGCCCGCGAG GCCCCGGGT GCCGCCCCCC TGGAGCCCC ACCTGGTGCA TGCACCGCAAC GCCGGTGCC TGAAACTTGT TTATGCAGC TTATATGGT TACAAATAA GCAATGGAT CCTAATAT GTATGCTATAT GTATGCTATA GCCGCTCT AGTTGTGTT TGCCAACT CATCATGTA TCTTATATA GTATGCTATAT GTATGCTATA GCCGCTTC AGTTGTGTT TGCCAACT CATCATGTA TCTTATATA GTATGCTATA GCCGCTGCT CCGCGCCCC CCGCGCCGC GCCCGCGCCCC GCCCCCCCC	ACGATCTGG AT	GGCAGCTT (CACCCGCACC	TTCAGCCTGC	GCGACGGCGG	CTACTACAGC	TCCGTGGTGG	
CCCCCCGCGT GAGGAGGATC ACAGCAACAC CGAGCTGGGC ATCGTGGAGT ACCAGCACGC CTTCAAGC CCGGATGCAG ATGCCGGTGA AGAAGAGGA AGCGGAGCTA CTAACTTCAG CCTGCTGAAG CAGGCTGGAG AGCTGGAGGA GAACCCTGGA CCTATGACGA GTAACAAGC CAGGCTGGC CTGCCCACC GCGCCACAC GGCGCACGC CCCCAGGGC GTACGCACCC TCCCCGCGCG GTGCGCGGC TACCCCGCCG CGCCGCCACAC CGTCGGCCC ACGCCGCACA TCGACCGGCT CACCGACGTC CAGACTCCT TCCTCACGCG GAGAGCGTCG AACCGGGGG GGTGTTCGC GAGATCGGC CCCCCATGGC CGAGTTGAGC GGTCCTGCG CACCGCGGGC GCCCGGGGG GGTGTTCGC GAGATCGGC CCCCCATGGC CGAGTTGAGC GGTCCTGCG CACCGTCGGC CCCCAGGC CAGACCC CCGCCCATGGC CGAGTTGACG GGTCCTGCG CACCGCGGGC GCCCGGGGG GCCGCCTC TGGCCGCGA CGCCCCCG CACCTCCC TTCTACGAG GGCCGCGCCC GCACCGCGGG CCCCACCTC AGGTCCCCA ACCACCTGGTC ACCTGGTGC TCCCCCC TGAACCTTGT TTATGCAC TTATATGGT TACAATAAA GCAATAGCAT CACAAATTTC ACAATAAG CATTTTTC ACGCACTCT AGTTGTGTT TGTCCAAAC ACCTGGTGCA CACCAATTTC ACAATAAG CATTTTTTC ACGCACTCT AGTTGTGGTT TGCCAAACT CATCAATGTA TCTTAATAAC TTCGTATAT GTATGCTATA CGAAGTTAT COCC GGCCCCCC ACCCCCCC CCCCC TCTACACGT CACCTGTAAC TACGCATAT ACGCACTCT AGTTGTGGTT TGTCCAAACT CACAATGTA TCTTAATAAC TTCGTATAT GTATGCTATA CGAAGTTAT CACGCACTCT AGTTGTGGTT TGTCCAAACT CACCATGTA TCTAATAAC TTCGTATAT GTATGCTATA CGAAGTTAT CACACACGGS 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. NM 153159 Q5D1E7 BC036563; MCPIP; MCPIP-1; Mcpip1; Reg1 Endoribonuclease involved in various biological functions such as cellular inflammatory response and immune homeostasis, gilal differentiation of neuroprogenitor cells, cell death of cardiomyocytes, adipogenesis and angiogenesis. Functions as an endoribonuclease involved in mRNA decay (PubMed:26000482). Modulates the inflammatory response by promoting the degradation of a set of translationally active cytokine-induced inflammation- related mRNAs, such as 1L6 and IL12B, during the early phase of inflammation PubMed:19322177, PubMed:2	ACAGCCACAT GC/	ACTTCAAG A	AGCGCCATCC	ACCCCAGCAT	CCTGCAGAAC	GGGGGCCCCA	TGTTCGCCTT	
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Construction of the knock of the knowledge of CRISPR technology. The system has been for knock-out varies due to the nature of the biology and the complexity of the experimental process. NM 153159 SDIET CONSTGS: MCPIP: MCPIP-1; Mcpip1; Reg1 Endoribonuclease involved in various biological functions such as cellular inflammatory response and immune homeostasis, glial differentiation of neuroprogenitor cells, cell death of cardiomyocytes, adipogenesis and angiogenesis. Functions as an endoribonuclease involved in various biological functions such as cellular inflammatory response and immune homeostasis, glial differentiation of neuroprogenitor cells, cell death of cardiomyocytes, adipogenesis and angiogenesis. Functions as an endoribonuclease involved in various biological functions such as cellular inflammatory response and immune homeostasis, glial differentiation of neuroprogenitor cells, cell death of cardiomyocytes, adipogenesis and angiogenesis. Functions as an endoribonuclease involved in various biological functions such as cellular inflammatory response and immune homeostasis, glial differentiation of neuroprogenitor cells, cell death of cardiomyocytes, adipogenesis and angiogenesis. Functions as an endoribonuclease involved in various biological functions (construct) as an endoribonuclease involved in various biological functions (construct) as an endoribonuclease involved in various biological functions (construct) as an endoribonuclease involved in various biological functions (construct) as an endoribonuclease involved in various biological functions (construct) as an endoribonuclease involved in the construct). Modulates the inflammatory response by poromoting the degradation of a set of translationally active cytokine-induced inflammation PubMed:19322177, PubMed:21115689, PubMed:23185455, PubMed:26000482). Prevents aberrant T-cell-mediated immune reaction by degradation of multiple mRNAs controlling T-tell activation, such as those encoding cytokines (ILG and IL2), cel	CGGATGCAG AT	GCCGGTGA A	AGAAAGAGGA	AGCGGAGCTA	CTAACTTCAG	CCTGCTGAAG	CAGGCTGGAG	
ACCCCCCA TICGAGCGGT CACCGAGCTG CAGAGACTT TCCTCACGGG GGGCGGGCG GACGGGGGG GGTGGGGT CACGAGCGG GGGCCGGGG TGGCGGGTG GACCGGGG GGGCGGGGGG GGGGGGGGGG	CCCACCCC CT	ACCCACCC 1		AGTACAAGCC			GUGAUGAUGI	
AGGEGEGEGEGEGEGEGEGEGEGEGEGEGEGEGEGEGEG	GACCGCCACA TC	GAGCGGGT (CACCGAGCTG	CAAGAACTCT	TCCTCACGCG	CGTCGGGCTC	GACATCGGCA	
GGTGTTCGCC GAGATCGGCC CGCGCATGGC CGAGTTGAGC GGTTCCCGGC TGGCCGCGCA GCAACAGATG GAAGGCCTCC TGGCGCCGCA CCGGCCCAG GAGCCGCG TGGTGCTGGC GGTCCTGGC CACCGTCGGC GCGGCGGGGT GCCCGCCTTC CTGGAGACCT CCGCGCCCG TGGTGCTCC CGGAGTGGGA GCGCCGGGCT CACCGTCAC GCCGACGTCG AGGTGCCCGA AGGACCGCGC ACCTGGTGC TGACCCGGC GCCGCGGCT CACCGTGCC TTATAGGT TACAAAAG GAATAGCAT CACAAATAACG CCCGGTGC TGAACTTGT TATTGCAGC TTATAATGGT TACAAATAAA GCAATAGCAT CACAAATTC ACAAATAACG CATTITTTC ACTGCATTC AGTTGTGGTT TGTCCAAACT CATCAATGAA CCATATAACC TTCGTATAAT GTATGCTATA CGAAGTTAT CACGCATTCT AGTTGTGGTT TGTCCAAACT CATCAATGAA TCTTAATAAC TTCGTATAAT GTATGCTATA CGAAGTTAT CACGCATTCT AGTTGTGGTT TGTCCAAACT CATCAATGAA TCTTAATAAC TTCGTATAAT GTATGCTATA CGAAGTTAT CACGCATTCT AGTTGTGGTT TGTCCAAACT CATCAATGAA CCATGTAT TGTAGCTATA CGAAGTTAT CACGCATTCT AGTTGTGGTT TGTCCAAACT CATCAATGAA CCACGTGAT ACGCATTCT AGTTGTGGTT TGTCCAAACT CATCAATGAA CCACAATGAAG CATTITTTC ACTGCATTCA GGTTGGTT TGTCCAAACT CATCAATGAAT CTTAATACC TTCGTATAAT GTATGCTATA CGAAGTTAT CACGCATTCT AGTTGTGGTT TGTCCAAACT CATCAATGAAT CTTATACC TTCGTATAAT GTATGCTATA CGAAGTTAT CACGCAACGAGG CAGGGTGTG TGTCGTGGT TGTCCAAACT CATCAATGAA CCACAATGAA GCATTGT FFF1a 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. NM 153159 QDD1E7 BC036563; MCPIP; MCPIP-1; Mcpip1; Reg1 Endoribonuclease involved in various biological functions such as cellular inflammatory response and immune homeostasis, glial differentiation of neuroprogenitor cells, cell death of cardiomyocytes, adipogenesis and angiogenesis. Functions as an endoribonuclease involved in mRNA decay (PubMed:26000482). Modulates the inflammatory response by promoting the degradation of a set of translationally active cytokine-induced inflammation- related mRNAs, such as IL6 and IL12	AGGTGTGGGT CG	GCGGACGAC (GGCGCCGCGG	TGGCGGTCTG	GACCACGCCG	GAGAGCGTCG	AAGCGGGGGC	
GAAGGCCTCC TGGCGCCGCA CCGGCCCAAG GAGCCGCGCT GGTTCCTGGC CACCGTCGGC GTCTCCCCG ACCACCAGGG CAAGGCTGT GGCAGCGCGC TCGTGCTCCC CGGAGTGAG GCGCCGAGC GCGCCGGCG ACCACCAGG CAAGGCTCCCC TCTACGAGC GCGCCGGCTC CACCGTCACC GCCGACCTCC AGGTGCCCGA AGGACCGCGC ACCTGGTGCA TGACCGCGA GCGCGGTCC TAAACTTG TTATTGCAGC TTATAATGGT TACAAATAAA GCAATAGCAT CACAAATAAAC GCCGGTGCC TAAACTTG ACTGCATTCT AGTTGTGGTT TGCCAAACT CACCAATGTA TCTAATAAC TTCGTATAT GTATGCTATA CGAAGTTAT ACGCATTCT AGTGTGGTT TGCCAAACT CACCAATGTA TCTAATAAC TTCGTATAT GTATGCTATA CGAAGTTAT LOXP LOXP LOXP FF1a 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. NM 153159 Q5D1E7 BC036563; MCPIP; MCPIP-1; Mcpip1; Reg1 Endoribonuclease involved in various biological functions such as cellular inflammatory response and immune homeostasis, gilal differentiation of neuroprogenitor cells, cell death of cardiomyocytes, adipogenesis and angiogenesis. Functions as an endoribonuclease involved in mRNA decay (PubMed:26000482). Modulates the inflammatory response by promoting the degradation of a set of translationally active cytokine-induced inflammation- related mRNAs, such as IL6 and IL12B, during the early phase of inflammation (PubMed:19322177, PubMed:21115689, PubMed:23185455, PubMed:26000482). Prevents aberrant T-cell-mediated immune reaction by degradation of multiple mRNAs controlling T- cell activation, such as those encoding cytokines (IL6 and IL2), cell surface receptors (ICOS, TNFRSF4 and TNFR2) and transcription factor (REL) (PubMed:23706741, PubMed:26000482, PubMed:19322177, PubMed:21115689, PubMed:23185455). Inhibits cooperatively with ZG3H12A the differentiation of helper T cells Th17 in lungs. They repress target mRNA	GTGTTCGCC GA	GATCGGCC (CGCGCATGGC	CGAGTTGAGC	GGTTCCCGGC	TGGCCGCGCA	GCAACAGATG	
ACCACCAGE CAAGETCIE ECACECE ICERCE CEGACIENCE CEGACIEGAC ECECEGECT ECCGACETC CEGEGACCECE CAACETCECC TECACECEGECT CACCETCACE ECCGACETC CEGEGACECEG CAACETCECC TECACECEGECT CAACETGET TTATTECCAEC TTATAATGET TACAAATAAA GCAATAGCAT CACAAATTAC CTCGTATAAT GTATGCTATA CGAAGTTAT ACTGCATTCT AGTTGTGGTT TGTCCAAACT CATCAATGTA TCTTAATAAC TTCGTATAAT GTATGCTATA CGAAGTTAT LOXP LOXP EF1a 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. NM 153159 Q5D1E7 BC036563; MCPIP; MCPIP-1; Mcpip1; Reg1 Endoribonuclease involved in various biological functions such as cellular inflammatory response and immune homeostasis, glial differentiation of neuroprogenitor cells, cell death of cardiomyocytes, adipogenesis and angiogenesis. Functions as an endoribonuclease involved in mRNA decay (PubMed:26000482). Modulates the inflammatory response by promoting the degradation of a set of translationally active cytokine-induced inflammation- related mRNAs, such as IL6 and IL12B, during the early phase of inflammation (PubMed:19322177, PubMed:21115689, PubMed:23185455, PubMed:26000482). Prevents aberrant T-cell-mediated immune reaction by degradation of multiple mRNAs controlling T- cell activation, such as those encoding cytokines (IL6 and IL2), cell surface receptors (ICOS, TNFRSF4 and TNFR2) and transcription factor (REL) (PubMed:23706741, PubMed:26000482, PubMed:19322177, PubMed:21115689, PubMed:23185455). Inhibits cooperatively with ZC3H12A the differentiation of helper T cells Th17 in lungs. They repress target mRNA	SAAGGCCTCC TG	GCGCCGCA (CCGGCCCAAG	GAGCCCGCGT	GGTTCCTGGC	CACCGTCGGC	GTCTCGCCCG	
Construction of the constr		AGGGICIG (GCGGCCGAGC	GCGCCGGGG	
TTATTGCAGC TTATAATGGT TACAAATAAA GCAATAGCAT CACAAATTTC ACAAATAAAG CATTTTTTC ACTGCATTCT AGTTGTGGTT TGTCCAAACT CATCAATGTA TCTTAATAAC TTCGTATAAT GTATGCTATA CGAAGTTAT LOXP LOXP GFP P2A Puro EF1a 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. NM 153159 Q5D1E7 BC036563; MCPIP; MCPIP-1; Mcpip1; Reg1 Endoribonuclease involved in various biological functions such as cellular inflammatory response and immune homeostasis, glial differentiation of neuroprogenitor cells, cell death of cardiomyocytes, adipogenesis and angiogenesis. Functions as an endoribonuclease involved in mRNA decay (PubMed:26000482). Modulates the inflammatory response by promoting the degradation of a set of translationally active cytokine-induced inflammation- related mRNAs, such as ILG and IL12B, during the early phase of inflammation (PubMed:19322177, PubMed:21115689, PubMed:23185455, PubMed:26000482). Prevents aberrant T-cell-mediated immune reaction by degradation of multiple mRNAs controlling T- cell activation, such as those encoding cytokines (ILG and IL2), cell surface receptors (ICOS, TNFRSF4 and TNFR2) and transcription factor (REL) (PubMed:23706741, PubMed:26000482, PubMed:19322177, PubMed:21115689, PubMed:23185455). Inhibits cooperatively with ZC3H12A the differentiation of helper T cells Th17 in lungs. They repress target mRNA	CCGACGTCG AG	GUAGACCI (AGGACCGCGC	ACCTGGTGCA	TGACCCGCAA	GCCCGGTGCC	TGAAACTTGT	
CTECATTET AGTTGTGGTT TGTCCAAACT CATCAATGTA TCTTAATAAC TTCGTATAAT GTATGCTATA CGAAGTTAT LOXP GFP P2A Puro EF1a These products are manufactured and supplied by OriGene under license from ERS. The kit is lesigned based on the best knowledge of CRISPR technology. The system has been unctionally 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. M 153159 25D1E7 3C036563; MCPIP; MCPIP-1; Mcpip1; Reg1 Endoribonuclease involved in various biological functions such as cellular inflammatory esponse and immune homeostasis, glial differentiation of neuroprogenitor cells, cell death of cardiomyocytes, adipogenesis and angiogenesis. Functions as an endoribonuclease nvolved in mRNA decay (PubMed:26000482). Modulates the inflammatory response by promoting the degradation of a set of translationally active cytokine-induced inflammation- elated mRNAs, such as IL6 and IL12B, during the early phase of inflammation PubMed:19322177, PubMed:21115689, PubMed:23185455, PubMed:26000482). Prevents berrant T-cell-mediated immune reaction by degradation of multiple mRNAs controlling T- tell activation, such as those encoding cytokines (IL6 and IL2), cell surface receptors (ICOS, NFRSF4 and TNFR2) and transcription factor (REL) (PubMed:23706741, PubMed:26000482, PubMed:19322177, PubMed:21115689, PubMed:23185455). Inhibits cooperatively with 2C3H12A the differentiation of helper T cells Th17 in lungs. They repress target mRNA	TATTGCAGC TT	ATAATGGT	ТАСАААТААА	GCAATAGCAT	CACAAATTTC	ACAAATAAAG	CATTTTTTTC	
LoxP LoxP GFP P2A Puro EF1a 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. NM 153159 OSD1E7 BC036563; MCPIP; MCPIP-1; Mcpip1; Reg1 Endoribonuclease involved in various biological functions such as cellular inflammatory response and immune homeostasis, glial differentiation of neuroprogenitor cells, cell death of cardiomyocytes, adipogenesis and angiogenesis. Functions as an endoribonuclease involved in mRNA decay (PubMed:26000482). Modulates the inflammatory response by promoting the degradation of a set of translationally active cytokine-induced inflammation- related mRNAs, such as IL6 and IL12B, during the early phase of inflammation (PubMed:19322177, PubMed:21115689, PubMed:23185455, PubMed:26000482). Prevents aberrant T-cell-mediated immune reaction by degradation of multiple mRNAs controlling T- cell activation, such as those encoding cytokines (IL6 and IL2), cell surface receptors (ICOS, TNFRSF4 and TNFR2) and transcription factor (REL) (PubMed:23706741, PubMed:26000482, PubMed:19322177, PubMed:21115689, PubMed:23185455). Inhibits cooperatively with ZC3H12A the differentiation of helper T cells Th17 in lungs. They repress target mRNA	ACTGCATTCT AG	STTGTGGTT 1	TGTCCAAACT	CATCAATGTA	TCTTAATAAC	TTCGTATAAT	GTATGCTATA	CGAAGTTAT
GFP P2A Puro EF1a Percentry P	oxP				LoxP			
EF1a hese products are manufactured and supplied by OriGene under license from ERS. The kit is esigned based on the best knowledge of CRISPR technology. The system has been unctionally validated for knocking-in the cassette downstream the native promoter. The fficiency of the knock-out varies due to the nature of the biology and the complexity of the xperimental process. <u>M 153159</u> <u>(5D1E7)</u> C036563; MCPIP; MCPIP-1; Mcpip1; Reg1 ndoribonuclease involved in various biological functions such as cellular inflammatory esponse and immune homeostasis, glial differentiation of neuroprogenitor cells, cell death f cardiomyocytes, adipogenesis and angiogenesis. Functions as an endoribonuclease ivolved in mRNA decay (PubMed:26000482). Modulates the inflammatory response by romoting the degradation of a set of translationally active cytokine-induced inflammation- elated mRNAs, such as IL6 and IL12B, during the early phase of inflammation PubMed:19322177, PubMed:21115689, PubMed:23185455, PubMed:26000482). Prevents berrant T-cell-mediated immune reaction by degradation of multiple mRNAs controlling T- ell activation, such as those encoding cytokines (IL6 and IL2), cell surface receptors (ICOS, NFRSF4 and TNFR2) and transcription factor (REL) (PubMed:23706741, PubMed:26000482, ubMed:19322177, PubMed:21115689, PubMed:23185455). Inhibits cooperatively with C3H12A the differentiation of helper T cells Th17 in lungs. They repress target mRNA		CEP	DDA	Duro				
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phase of inflammation in a helicase UPF1-dependent manner (PubMed:19322177,

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CRIGENE Zc3h12a Mouse Gene Knockout Kit (CRISPR) – KN519636

PubMed:23185455, PubMed:23706741, PubMed:26000482, PubMed:26134560). Plays a role in the inhibition of microRNAs (miRNAs) biogenesis (By similarity). Cleaves the terminal loop of a set of precursor miRNAs (pre-miRNAs) important for the regulation of the inflammatory response leading to their degradation, and thus preventing the biosynthesis of mature miRNAs (By similarity). Plays also a role in promoting angiogenesis in response to inflammatory cytokines by inhibiting the production of antiangiogenic microRNAs via its antidicer RNase activity (By similarity). Affects the overall ubiquitination of cellular proteins (PubMed:21115689). Positively regulates deubiquitinase activity promoting the cleavage at 'Lys-48'- and 'Lys-63'-linked polyubiguitin chains on TNF receptor-associated factors (TRAFs), preventing JNK and NF-kappa-B signaling pathway activation, and hence negatively regulating macrophage-mediated inflammatory response and immune homeostasis (PubMed:21115689). Induces also deubiquitination of the transcription factor HIF1A, probably leading to its stabilization and nuclear import, thereby positively regulating the expression of proangiogenic HIF1A-targeted genes. Involved in a TANK-dependent negative feedback response to attenuate NF-kappaB activation through the deubiquitination of IKBKG or TRAF6 in response to interleukin-1-beta (IL1B) stimulation or upon DNA damage (By similarity). Prevents stress granules (SGs) formation and promotes macrophage apoptosis under stress conditions, including arsenite-induced oxidative stress, heat shock, and energy deprivation (PubMed:21971051). Plays a role in the regulation of macrophage polarization; promotes IL4induced polarization of macrophages M1 into anti-inflammatory M2 state (PubMed:25934862). May also act as a transcription factor that regulates the expression of multiple genes involved in inflammatory response, angiogenesis, adipogenesis and apoptosis (PubMed:18178554, PubMed:19666473, PubMed:22739135). Functions as a positive regulator of glial differentiation of neuroprogenitor cells through an amyloid precursor protein (APP)dependent signaling pathway (By similarity). Attenuates septic myocardial contractile dysfunction in response to lipopolysaccharide (LPS) by reducing I-kappa-B-kinase (IKK)mediated NF-kappa-B activation, and hence myocardial proinflammatory cytokine production (PubMed:21616078).[UniProtKB/Swiss-Prot Function]

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