

## Product datasheet for **KN310583**

### Myd88 Mouse 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:       | Myd88  |
| Locus ID:     | 17874  |
| Components:   | <p><b>KN310583G1</b>, Myd88 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTCTGCGGGAGACCCCGCG</p> <p><b>KN310583G2</b>, Myd88 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CCCACGTTAAGCGCGACCAA</p> <p><b>KN310583D</b>, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p> <p>Homologous arm and GFP-puro sequences:<br/>pUC vector backbone in gray; Left arm sequence in blue; GFP-puro in green; Right arm in violet</p> <pre> CAACGTTAAA GAGTAAGGTG GTAGGTTCCG CGTGTTTTTT GCAGACCCCG GGAAGGTAGT GCTGTTTGTC TCAGAAAACA AAGGACAAGA TACCCTAAAT GCCAATTTAT GGGCAAGGTC GTGGGCTTTC CCCTTTAAAA AGCAGAGTCA CAAGTGACAT CAGATAGCTA AAGGTAGACT GAGCCTTCGG GTTACTACTT CCGAAGCCAG TCTGTCTCTT CCCTCCCTAC TACCAGAATA TAAATTACTG TACAGAAGGG CTGTAACTCC TTCAAGTCCT AAACAAGGCT GATTGAGCTA ACCATGCATA ATAACCACTA CCAGATCGCC TAGTCCATCC ACCTTGATCG GTGGGCCAAG GCAGATGCCA GAGGCGGTTT ATATAAATTC TCACACCTTC GAGGGGAGGT GAGCAAACGT TAGAAGCACA AGTGGGTTGA CTTTTAGGCT GGGTAGTTCT GGCCCCGTAG TCTAGATTCT AGCAAAGGGC GGAGCTTCTC GGAAAGCGAA AGAAGGAGGG GCTGGCAGGA GACTTAAGGG AAGTAGGAAA CTCCACAGGC GAGCGTACTG GACGGCACCG GGGGCCCAGG GTTGCCTGCC ATCGCTGTTC TTGAACCCTC GGACGCCCGT GGCGGCCGAC TGGACCTTGC TGGCGGAGGA GATGGGCTTC GAGTACTTGG AGATCCGAGA GCTGGAACG CGCCCTGACC CCACTCGCAG TTTGTTGGAT GCCTGGCAGG GCGCTCTGG CGCGTCTGTC GGCAGGCTGC TAGAGCTGCT GGCCTTGTTA GACCGTGAGG ATATACTGAA GGAGCTGAAG TCGCGCATCG GTGAGGAAAC GTGCTTCCTG GCTTTGTGCC AAGGATCAAC GAGGCTAGCC TTGGCATATT AATCTTGTTT ATTTTTTTCT GGGGTGCGCT AGGGAGGAAG AGAGTGACAG TGAATTTTC TGTCAGTATG CAGGTCAGCG TAGGGATTGG GAGAGGGGTC AAAAACCTTG AGGAAAGATG GAAAGAGCCT AGGCAAAGAC CTTAGTTGT ACCAAGAGTC AAGATCTGCT TTTCTCGCGG TATCTCAGTT GTGTCAGGAT CAACCGGACA AGTGAGGACC CCTTCCATCA CTCACTGGCA CTCAGCACAA CACCCCGGCC CCGCCCACAG TGAGGTACAC CTTGCTAGAT GGGGGTCACC ATTCTCATTG </pre> <p><b>GE100003</b>, scramble sequence in pCas-Guide vector</p> |



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**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\\_010851](#)

**UniProt ID:**

[P22366](#)

**Summary:**

Adapter protein involved in the Toll-like receptor and IL-1 receptor signaling pathway in the innate immune response (PubMed:9697844). Acts via IRAK1, IRAK2, IRF7 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response (PubMed:9575168, PubMed:9697844). Increases IL-8 transcription. Involved in IL-18-mediated signaling pathway (PubMed:9697844). Isoform 2 is defective in its ability to induce IRAK phosphorylation and NF-kappa-B activation and can function as a negative regulator of activation by IL-1 or lipopolysaccharide (LPS) (PubMed:11909531). Activates IRF1 resulting in its rapid migration into the nucleus to mediate an efficient induction of IFN-beta, NOS2/INOS, and IL12A genes (PubMed:17018642). MyD88-mediated signaling in intestinal epithelial cells is crucial for maintenance of gut homeostasis and controls the expression of the antimicrobial lectin REG3G in the small intestine (PubMed:17635956, PubMed:21998396). Mediates leukocyte recruitment at the inflammatory site (PubMed:18941239).  
[UniProtKB/Swiss-Prot Function]

**Product images:**
