

# Product datasheet for KN207515BN

## TLR7 Human Gene Knockout Kit (CRISPR)

## **Product data:**

#### OriGene Technologies, Inc.

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Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control
Donor DNA:	mBFP-Neo
Symbol:	TLR7
Locus ID:	51284
Components:	<ul> <li>KN207515G1, TLR7 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)</li> <li>KN207515G2, TLR7 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)</li> <li>KN207515BND, donor DNA containing left and right homologous arms and mBFP-Neo functional cassette.</li> <li>GE100003, scramble sequence in pCas-Guide vector</li> </ul>
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:	<u>NM 016562</u>
UniProt ID:	<u>Q9NYK1</u>
Synonyms:	TLR7-like
Synonyms.	

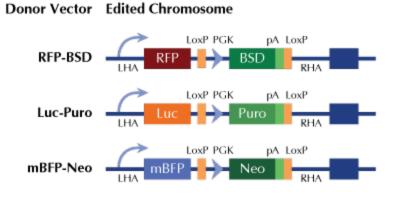


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#### STLR7 Human Gene Knockout Kit (CRISPR) – KN207515BN

Summary:The protein encoded by this gene is a member of the Toll-like receptor (TLR) family which<br/>plays a fundamental role in pathogen recognition and activation of innate immunity. TLRs are<br/>highly conserved from Drosophila to humans and share structural and functional similarities.<br/>The human TLR family comprises 11 members. They recognize pathogen-associated<br/>molecular patterns (PAMPs) that are expressed on infectious agents, and mediate the<br/>production of cytokines necessary for the development of effective immunity. For the<br/>recognition of structural components in foreign microorganisms, the various TLRs exhibit<br/>different patterns of expression as well; in this way for example, TLR-3, -7, and -8 are<br/>essential in the recognition of single-stranded RNA viruses. TLR7 senses single-stranded RNA<br/>oligonucleotides containing guanosine- and uridine-rich sequences from RNA viruses, a<br/>recognition occuring in the endosomes of plasmacytoid dendritic cells and B cells. This gene<br/>is predominantly expressed in lung, placenta, and spleen, and is phylogenetically related and<br/>lies in close proximity to another family member, TLR8, on chromosome X. [provided by<br/>RefSeq, Aug 2020]

### **Product images:**



RFP, Luc, and mBFP will be under native gene promoter

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