

## Product datasheet for **KN205760LP**

### CYP1A1 Human Gene Knockout Kit (CRISPR)

#### Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control
Donor DNA:	Luciferase-Puro
Symbol:	CYP1A1
Locus ID:	1543
Components:	<b>KN205760G1</b> , CYP1A1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) <b>KN205760G2</b> , CYP1A1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) <b>KN205760LPD</b> , donor DNA containing left and right homologous arms and Luciferase-Puro functional cassette. <b>GE100003</b> , 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\\_000499](#), [NM\\_001319216](#), [NM\\_001319217](#)

**UniProt ID:** [P04798](#)

**Synonyms:** AHH; AHRR; CP11; CYP1; CYP1A1; P1-450; P450-C; P450DX

**Summary:** This gene, CYP1A1, encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and its expression is induced by some polycyclic aromatic hydrocarbons (PAHs), some of which are found in cigarette smoke. The enzyme's endogenous substrate is unknown; however, it is able to metabolize some PAHs to carcinogenic intermediates. The gene has been associated with lung cancer risk. A related family member, CYP1A2, is located approximately 25 kb away from CYP1A1 on chromosome 15. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jan 2016]



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## Product images:

