



**Xcess Biosciences Inc.**

7144 N Harlem Ave #169  
Chicago, IL 60631 USA

<http://www.xcessbio.com>

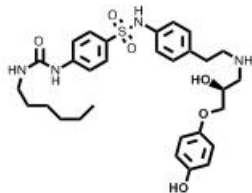
Toll free: 1-866-706-2330

Fax: 1-619- 810-0718

Email: [info@xcessbio.com](mailto:info@xcessbio.com)

## CRISPR Editing Enhancer - L755,507

**Chemical Name:** (S)-4-(3-hexylureido)-N-(4-(2-((2-hydroxy-3-(4-hydroxyphenoxy)propyl)amino)ethyl)phenyl)benzenesulfonamide



Molecular Weight:	584.73
Formula:	C <sub>30</sub> H <sub>40</sub> N <sub>4</sub> O <sub>6</sub> S
Purity:	≥98%
CAS#:	159182-43-1
Solubility:	DMSO up to 100 mM
Storage	Powder: 4 °C 1 year DMSO: 4 °C 3 months -20 °C 1 year

### Biological Activity:

L-755,507 was previously characterized as a potent and selective  $\beta_3$  adrenergic receptor partial agonist with  $EC_{50} \sim 0.43$  nM. It has > 1000 fold selectivity over  $\beta_1$ - and  $\beta_2$ -adrenoceptors ( $EC_{50} \sim 580$  nM and >10000 nM for  $\beta_1$ - and  $\beta_2$ -adrenoceptors respectively). It stimulates lipolysis in rhesus adipocytes in vitro ( $EC_{50} = 3.9$  nM). In a recent study, L-755,507 was identified to enhance CRISPR-mediated homology-directed repair (HDR) efficiency in human induced pluripotent stem cells (iPSCs) and other cell types.

### How to Use:

**In vitro:** L-755,507 was used at 1-5  $\mu$ M final concentration in various in vitro assays.

**In vivo:** L-755,507 stimulates metabolic rate by 30% after acute bolus intravenous administration of 0.1 mg/kg to rhesus monkeys.

### Reference:

1. Fisher MH, et al. A selective human beta3 adrenergic receptor agonist increases metabolic rate in rhesus monkeys. (1998) J Clin Invest.101(11):2387-93.
2. Parmee ER, et al. Discovery of L-755,507: a subnanomolar human beta 3 adrenergic receptor agonist. (1998) Bioorg Med Chem Lett. 8(9):1107-12.
3. Yu C, et al. Small Molecules Enhance CRISPR Genome Editing in Pluripotent Stem Cells. (2015) Cell Stem Cell 16(2):142-7.

Products are for research use only. Not for human use.