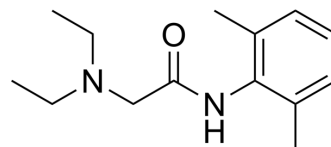


## Lidocaine (Standard)

<b>Cat. No.:</b>	HY-B0185R
<b>CAS No.:</b>	137-58-6
<b>Molecular Formula:</b>	C <sub>14</sub> H <sub>22</sub> N <sub>2</sub> O
<b>Molecular Weight:</b>	234.34
<b>Target:</b>	Sodium Channel; MEK; ERK; NF-κB; Apoptosis
<b>Pathway:</b>	Membrane Transporter/Ion Channel; MAPK/ERK Pathway; Stem Cell/Wnt; NF-κB; Apoptosis
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 100 mg/mL (426.73 mM)  
 H<sub>2</sub>O : ≥ 5 mg/mL (21.34 mM)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent	1 mg	5 mg	10 mg
	Concentration			
	1 mM	4.2673 mL	21.3365 mL	42.6730 mL
	5 mM	0.8535 mL	4.2673 mL	8.5346 mL
	10 mM	0.4267 mL	2.1337 mL	4.2673 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

Lidocaine (Standard) is the analytical standard of Lidocaine. This product is intended for research and analytical applications. Lidocaine (Lignocaine) inhibits sodium channels involving complex voltage and using dependence<sup>[1]</sup>. Lidocaine decreases growth, migration and invasion of gastric carcinoma cells via up-regulating miR-145 expression and further inactivation of MEK/ERK and NF-κB signaling pathways. Lidocaine is an amide derivative and has potential for the research of ventricular arrhythmia<sup>[2]</sup>.

#### IC<sub>50</sub> & Target

ERK	MEK	NF-κB
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### CUSTOMER VALIDATION

- Nat Methods. 2021 Jul;18(7):788-798.

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- J Neuroinflammation. 2017 Nov 2;14(1):211.
  - Stem Cell Res Ther. 2021 Feb 4;12(1):107.
  - PLoS Pathog. 2023 Feb 3;19(2):e1011126.
  - Int Immunopharmacol. 2023 Jan 11;115:109706.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

**Caution: Product has not been fully validated for medical applications. For research use only.**

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