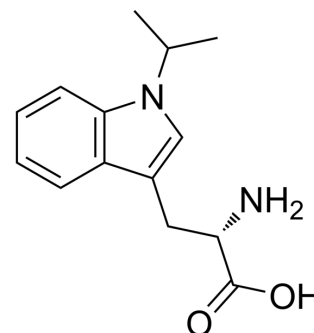


## 1-Isopropyltryptophan

Cat. No.:	HY-154387
CAS No.:	1219485-46-7
Molecular Formula:	C <sub>14</sub> H <sub>18</sub> N <sub>2</sub> O <sub>2</sub>
Molecular Weight:	246.3
Target:	Indoleamine 2,3-Dioxygenase (IDO)
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	1-Isopropyltryptophan (1-IsoPT) is a IDO1 inhibitor. 1-Isopropyltryptophan decreases the expression of IFN- $\gamma$ stimulated IDO-1 and IDO-2 mRNA <sup>[1]</sup> .								
<b>IC<sub>50</sub> &amp; Target</b>	IDO1								
<b>In Vitro</b>	<p>1-Isopropyltryptophan (24 h) shows cytotoxicity for mouse DC 2.4 lines with an IC<sub>50</sub> value of 2.156 mM<sup>[1]</sup>.</p> <p>1-Isopropyltryptophan (100 <math>\mu</math>M; 48 h) decreases the expression of IFN-<math>\gamma</math> (0.5 <math>\mu</math>g/ml) stimulated IDO-1 and IDO-2 mRNA in DC 2.4 cells<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>RT-PCR<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>DC 2.4 cells</td> </tr> <tr> <td>Concentration:</td> <td>100 <math>\mu</math>M</td> </tr> <tr> <td>Incubation Time:</td> <td>48 h</td> </tr> <tr> <td>Result:</td> <td>Decreased the IDO-1 and IDO-2 mRNA expression in IFN-<math>\gamma</math> (0.5 <math>\mu</math>g/ml) treated DCs.</td> </tr> </table>	Cell Line:	DC 2.4 cells	Concentration:	100 $\mu$ M	Incubation Time:	48 h	Result:	Decreased the IDO-1 and IDO-2 mRNA expression in IFN- $\gamma$ (0.5 $\mu$ g/ml) treated DCs.
Cell Line:	DC 2.4 cells								
Concentration:	100 $\mu$ M								
Incubation Time:	48 h								
Result:	Decreased the IDO-1 and IDO-2 mRNA expression in IFN- $\gamma$ (0.5 $\mu$ g/ml) treated DCs.								

### REFERENCES

[1]. Sun T, et al. Novel 1-alkyl-tryptophan derivatives downregulate IDO1 and IDO2 mRNA expression induced by interferon-gamma in dendritic cells. Mol Cell Biochem. 2010 Sep;342(1-2):29-34.

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

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