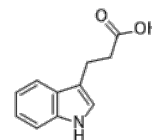


Product Name : Indole-3-propionic acid
Cat. No. : PC-28012
CAS No. : 830-96-6
Molecular Formula : C₁₁H₁₁NO₂
Molecular Weight : 189.21
Target : HIF/HIF Prolyl-hydroxylase
Solubility : 10 mM in DMSO



Biological Activity

Indole-3-propionic acid (IPA, 3-IPA, 3-Indolepropionic acid) is a gut microbiota-derived tryptophan metabolite and endogenous **agonist** of hypoxia-inducible factor-1 α (**HIF-1 α**), competitively inhibiting HIF-1 α interaction with VHL protein and preventing proteasomal degradation, thereby stabilizing HIF-1 α .

Indole-3-propionic acid protects against myocardial infarction in a HIF-1 α -dependent manner.

Indole-3-propionic acid alleviates ATO-induced intestinal inflammation and behavioural deficits.

Indole-3-propionic acid inhibits ATO-induced **BRD4** degradation and the associated reduction in H4 acetylation, thereby restoring the expression of the metabolic enzyme PFKM and the synaptic protein PSD95.

Indole-3-propionic acid promotes lymph node metastasis in gastric cancer via AHR/CYP1A1-VEGFR3 axis.

References

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Yang S, et al. *Cell Host Microbe*. 2026 Jul 8;34(7):1333-1349.e10.

Wang M, et al. *Cancer Metab*. 2026 May 20;14(1):23.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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