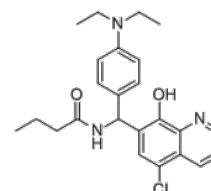


Product Name : CBA-1
Cat. No. : PC-20353
CAS No. : 333318-69-7
Molecular Formula : C₂₄H₂₈ClN₃O₂
Molecular Weight : 425.96
Target : Histone Demethylase
Solubility : 10 mM in DMSO



Biological Activity

CBA-1 is a small molecule inhibitor of **Wnt signaling**, specifically targets Jumonji (JmjC) domain-containing demethylase **KDM3A** with IC₅₀ of 3.9 μM.

CBA-1 also poorly inhibited KDM3B.

CBA-1 (3 μM) inhibited Wnt signaling induced by either LiCl or Wnt protein in TOPFlash reporter assays, repressed the expression of Wnt target genes and inhibited cell proliferation in CRC cells, inhibited colon cancer organoids formation.

The binding affinity of CBA-1 to KDM3A is greater than that of GSK-J1, CBA-1 was a better Wnt inhibitor than either GSK-J1 or GSK-J4.

CBA-1 showed no clear effects on the assembly of β-catenin/TCF.

CBA-1 inhibited Wnt signaling in the tail of Wnt/β-catenin zebrafish reporter line.

CBA-1 (5 and 10 μM) was able to rescue completely the loss-of-eye phenotype in zebrafish.

References

Wen Zhang, et al. *iScience*. 2020 Nov 13;23(12):101795.

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

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