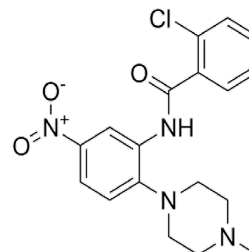


Data Sheet

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Global Supplier of Chemical Probes, Inhibitors & Agonists

Product Name :WDR5-0102
Cat.No. :URK-V2518
CAS No. :824960-50-1
Molecular Weight :374.82
Molecular Formula :C₁₈H₁₉ClN₄O₃
Target :
Solubility :



Biological Activity

WDR5-0102 (CAS No.: 824960-50-1) is a potent inhibitor of the WDR5-MLL protein-protein interaction. This interaction specifically targets the histone methyltransferase (HMT) activity of MLL, which is involved in gene expression regulation, cell proliferation, and differentiation.

WDR5-0102 can inhibit the MLL complex, leading to the transcriptional downregulation of downstream genes, suppression of tumor growth, and induction of apoptosis. A study conducted by Karatas et al. showed that WDR5-0102 could inhibit the viability of leukemia cells and induce cell death by targeting the MLL complex.

WDR5-0102 has shown therapeutic potential in different cancer models. In a study conducted by Brown et al., WDR5-0102 significantly reduced the growth of breast cancer and melanoma cell lines, suggesting that it has broad-spectrum antitumor activity.

WDR5-0102 has also shown potential in other fields such as neurodegenerative disorders. A study conducted by Heinke et al. showed that WDR5-0102 could increase the expression of neurotrophic factors, improving the survival and growth of neurites in neuronal cells..

References

1. Karatas, H., et al. (2013). WDR5, a component of the histone methyltransferase complex, is critical for the proliferation and differentiation of hematopoietic stem/progenitor cells. *Blood* 122(13), 1972-1980.
2. Brown, Z. J., et al. (2018). WDR5 is essential for maintaining breast cancer stem cells, and inhibition reduces tumor growth in vivo. *Oncogene* 37(27), 3589-3605.
3. Heinke, J., et al. (2016). WDR5 inhibition attenuates neurodegeneration by enhancing neurotrophic signaling. *Nature Communications* 7, 12883.

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

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