

Product Data Sheet

Glutaminyl cyclases-IN-1

 Cat. No.:
 HY-151132

 CAS No.:
 3032400-33-9

 Molecular Formula:
 $C_{25}H_{30}N_6O_2S$

Molecular Weight: 478.61

Target: Others

Pathway: Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	Glutaminyl cyclases-IN-1 (IsoQC-IN-1) is a potent glutaminyl cyclases (QC) inhibitor with IC $_{50}$ values of 12 nM and 73 nM for human QC and isoQC, respectively. Glutaminyl cyclases-IN-1 can selectively interfere with the interaction of CD47/SIRP α through isoQC inhibition, and enhances the increased phagocytic activity of both THP-1 and U937 macrophages ^[1] .
IC ₅₀ & Target	IC ₅₀ : 12 nM (human QC), 73 nM (iso QC) ^[1]
In Vitro	Glutaminyl cyclases-IN-1 (compound 22b) (0-20 μ M; 24 or 48 h; A549 and H1975) increases the phagocytic activity of both THP-1 and U937 macrophages in a dose-dependent manner in A549 and H1975 cells; decreases the surface expression level of α hCD47-CC2C6 without interfering in α hCD47-B6H12 binding with CD47 ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Eunsun Park, et al. 2-Amino-1,3,4-thiadiazoles as Glutaminyl Cyclases Inhibitors Increase Phagocytosis through Modification of CD47-SIRP α Checkpoint. ACS Med. Chem. Lett. 2022.

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

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