

Product Datasheet

TREM2 agonist-2

Catalog No. **BP-02043** · CAS **2738485-98-6** · Form **free base** · Physical state **solid** · Color **White to off-white** · Version **1.0** · Revision **2026-09-07**

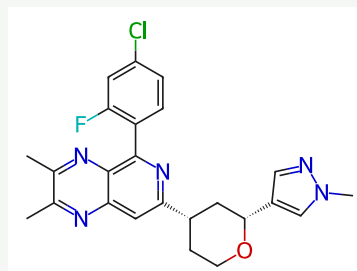
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Target TREM2	Research area Alzheimer's Disease
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Molecular formula **C₂₄H₂₃ClFN₅O**

Molecular weight **451.9240**

STRUCTURE



DESCRIPTION

VG-3927 (SAR448851) is a highly potent, selective, and orally bioavailable small-molecule TREM2 (Triggering Receptor Expressed on Myeloid Cells 2) agonist. It functions via a novel molecular glue-like mechanism, binding directly to the transmembrane/ectodomain hydrophobic pocket of the TREM2 receptor. This interaction promotes the clustering and stable complex formation between TREM2 and its essential co-receptor DAP12, avoiding sequestration by soluble TREM2 (sTREM2) which frequently limits monoclonal antibody therapeutics.

BIOLOGICAL ACTIVITY

Product Specifications: VG-3927 (Free Base) * **CAS Number:** 2738485-98-6 * **Target:** Potent & Selective Small-Molecule TREM2 Agonist * **In Vitro Potency:** EC₅₀ = 88.2 nM (p-SYK activation in hTREM2 cells) * **Purity:** ≥98.0% (HPLC, 1H-NMR, LC-MS validated) * **Application:** Research Use Only (RUO). Ideal for Alzheimer's disease pathology modeling, neuroinflammation assays, and microglial phagocytosis studies.

SOLUBILITY

Soluble in DMSO

REFERENCES

- [1]. Yuan S, et al. Discovery of a Small Molecule TREM2 Agonist with Improved In Vitro Pharmacokinetic Profile and Validated Target Engagement. ACS Med Chem Lett. 2025 Jul 29;16(8):1634-1640.
- [2]. Mirescu C. Characterization of the first TREM2 small molecule agonist, VG-3927, for clinical development in Alzheimer's disease. Alzheimers Dement. 2025 Jan 9;20(Suppl 6):e084622. doi: 10.1002/alz.084622. PMCID: PMC11712879.
- [3]. Yuan, Shaoren et al. "Discovery of an Achiral Small Molecule TREM2 Agonist with Improved Pharmacokinetic Profile and Validated Target Engagement." bioRxiv : the preprint server for biology 2025.06.22.660908. 26 Jun.

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Lot CoA and SDS are separate documents.