

Product Name	: GB1107
Synonyms	: GB-1107; GB 1107
Cat No.	: M13093
CAS Number	: 1978336-61-6
Molecular Formula	: C ₂₀ H ₁₆ Cl ₂ F ₃ N ₃ O ₄ S
Formula Weight	: 522.32
Chemical Name	: 3,4-dichlorophenyl 3-deoxy-3-[4(3,4,5-trifluorophenyl)-1H-1,2,3- triazol-1-yl]-1-thio-α-D-galactopyranoside
Description	GB1107 (GB-1107, GB 1107) is a potent, selective, orally active inhibitor of Galectin-3 (Gal-3) with K_d of 37 nM (human Galectin-3); displays >100-fold lower affinity for most of the tested human galectins, and 20 and 4-fold lower affinity for galectin-2 and the C-terminal CRD of galectin-4, respectively; prevents human lung adenocarcinoma growth in vivo, increases tumor M1 macrophage polarization and CD8+ T cell infiltration; GB1107 also can potentiate the effects of a PD-L1 immune checkpoint inhibitor to increase expression of cytotoxic (IFN-γ, granzyme B, perforin-1, Fas ligand) and apoptotic (cleaved caspase-3) effector molecules.
Pathway	: Cytoskeleton/Cell Adhesion Molecules
Target	: Galectin
Receptor	: Galectin
Solubility	: —
SMILES	: <chem>O[C@H]1([C@@H](N1N=NC2=CC(F)=C(F)C(F)=C2)=C1)[C@H]([C@@H](CO)O3O)[C@H]3SC4=CC=C(Cl)C(Cl)=C4</chem>
Storage	: (-20°C)
Stability	: ≥ 2 years
Reference	:

1. Vuong L, et al. Cancer Res. 2019 Jan, doi: 10.1158/0008-5472.CAN-18-2244. 2. Zetterberg FR, et al. ChemMedChem. 2018 Jan 22;13(2):133-137.