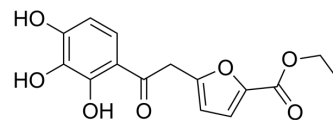


MMG-11

| | | | |
|--------------------|--|-------|----------|
| Cat. No.: | HY-112146 | | |
| CAS No.: | 313254-94-3 | | |
| Molecular Formula: | C ₁₅ H ₁₄ O ₇ | | |
| Molecular Weight: | 306.27 | | |
| Target: | Toll-like Receptor (TLR) | | |
| Pathway: | Immunology/Inflammation | | |
| Storage: | Powder | -20°C | 3 years |
| | | 4°C | 2 years |
| | In solvent | -80°C | 6 months |
| | | -20°C | 1 month |



SOLVENT & SOLUBILITY

| | | | | | |
|---|---|--------------------------|--------------|------------|------------|
| In Vitro | DMSO : 100 mg/mL (326.51 mM; Need ultrasonic) | | | | |
| | | Solvent Concentration | Mass 1 mg | 5 mg | 10 mg |
| | Preparing Stock Solutions | 1 mM | 3.2651 mL | 16.3255 mL | 32.6509 mL |
| | | 5 mM | 0.6530 mL | 3.2651 mL | 6.5302 mL |
| 10 mM | | 0.3265 mL | 1.6325 mL | 3.2651 mL | |
| Please refer to the solubility information to select the appropriate solvent. | | | | | |
| In Vivo | 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (6.79 mM); Clear solution | | | | |
| | 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (6.79 mM); Clear solution | | | | |

BIOLOGICAL ACTIVITY

| | |
|---------------------------|--|
| Description | MMG-11 is a potent and selective human TLR2 antagonist with low cytotoxicity. MMG-11 inhibits both TLR2/1 and TLR2/6 signaling with IC ₅₀ s of 1.7 μM for Pam ₃ CSK ₄ -induced hTLR2/1 and 5.7 μM for Pam ₂ CSK ₄ -induced hTLR2/6 responses ^[1] . |
| IC ₅₀ & Target | TLR2 |
| In Vitro | MMG-11 neither shows cellular toxicity nor interference with signaling induced by other TLR agonists, IL-1β or TNF. MMG-11 (0.01-100 μM) shows no cytotoxic effects up to 100 μM in peripheral blood mononuclear cells (PBMCs) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Cytotoxicity Assay ^[1] |

| | |
|------------------|--|
| Cell Line: | PBMCs |
| Concentration: | 0.01, 1, 10, 100 μ M |
| Incubation Time: | |
| Result: | Showed no cytotoxic effects up to 100 μ M. |

CUSTOMER VALIDATION

- Cell Commun Signal. 2023 May 1;21(1):86.
- Mol Immunol. 2021 Feb;130:85-95.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Grabowski M, et al. Identification of a pyrogallol derivative as a potent and selective human TLR2 antagonist by structure-based virtual screening. Biochem Pharmacol. 2018 Aug;154:148-160.

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

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