

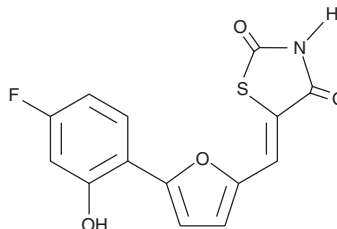
Product Information



AS-252424

Item No. 10009052

Cas Registry No.: 900515-16-4
Formal Name: 5-[5-(4-fluoro-2-hydroxy-phenyl)-furan-2-ylmethylene]-thiazolidine-2,4-dione
MF: C₁₄H₈FNO₄S
FW: 305.3
Purity: ≥95%
Stability: ≥1 year at -20°C
Supplied as: A crystalline solid
Misc: Light sensitive



Laboratory Procedures

For long term storage, we suggest that AS-252424 be stored as supplied at -20°C. It should be stable for at least one year. AS-252424 is supplied as a crystalline solid. A stock solution may be made by dissolving the AS-252424 in the solvent of choice. AS-252424 is soluble in organic solvents such as DMSO, dimethyl formamide (DMF), and ethanol, which should be purged with an inert gas. The solubility of AS-252424 in DMSO and DMF is approximately 20 mg/ml, and in ethanol it is approximately 10 mg/ml.

AS-252424 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AS-252424 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AS-252424 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Phosphatidylinositol 3-kinase (PI3K) catalyzes the phosphorylation of PI at the 3 position to produce the second messengers PtdIns-(3,4)-P₂ and PtdIns-(3,4,5)-P₃.¹⁻³ PI3K γ is a class 1B PI3K that is composed of a p110 catalytic subunit and a p101 or p84 regulatory subunit, whereas PI3K α , β , and δ are class 1A enzymes composed of p110 and p85 subunits.⁴ AS-252424 is a potent inhibitor of PI3K with selectivity for the γ isoform. It inhibits human recombinant PI3K γ , α , β , and δ with IC₅₀ values of 30, 940, 20,000, and 20,000 nM, respectively.⁵ AS-252424 also inhibits C5a-mediated phosphorylation of Akt in RAW 264.7 macrophages with an IC₅₀ value of 0.23 μ M. In a murine model of peritonitis, AS-252424 inhibited neutrophil recruitment 35% at a dose of 10 mg/kg.⁵

References

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2. Vivanco, I. and Sawyers, C.L. The phosphatidylinositol 3-kinase-AKT pathway in human cancer. *Nature Reviews Cancer* **2**, 489-501 (2002).
3. Hennessy, B.T., Smith, D.L., Ram, P.T., *et al.* Exploiting the PI3K/AKT pathway for cancer drug discovery. *Nature Reviews Drug Discovery* **4**, 988-1004 (2005).
4. Rückle, T., Schwarz, M.K., and Rommel, C. PI3K γ inhibition: Towards an 'aspirin of the 21st century'? *Nature Reviews Drug Discovery* **5**, 903-918 (2006).
5. Pomel, V., Klicic, J., Covini, D., *et al.* Furan-2-ylmethylene thiazolidinediones as novel, potent, and selective inhibitors of phosphoinositide 3-kinase γ . *J. Med. Chem.* **49**, 3857-3871 (2006).

Related Products

NVP-BE2235 - Item No. 10565 • 3,5-dimethyl PIT-1 - Item No. 10727 • PIT-1 - Item No. 10728 • PtdIns-(4,5)-P₂ (1,2-dioctanoyl) (sodium salt) - Item No. 64910 • LY294002 - Item No. 70920 • AS-605240 (potassium salt) - Item No. 9000980 • TGX-221 - Item No. 10007349 • S-605240 - Item No. 10007707 • PtdIns-(4,5)-P₂ (1,2-dihexanoyl) (sodium salt) - Item No. 10007762 • OSU03012 - Item No. 10008005 • PtdIns-(4,5)-P₂-biotinimide (sodium salt) - Item No. 10008159 • PI-103 - Item No. 10009209 • PtdIns-(3,4,5)-P₃-biotinimide (sodium salt) - Item No. 10009531

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

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