

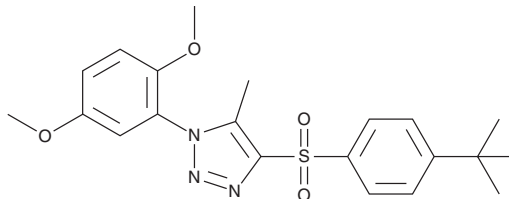
# PRODUCT INFORMATION



## SPA70

Item No. 34490

**CAS Registry No.:** 931314-31-7  
**Formal Name:** 1-(2,5-dimethoxyphenyl)-4-[[4-(1,1-dimethylethyl)phenyl]sulfonyl]-5-methyl-1H-1,2,3-triazole  
**Synonym:** Specific PXR Antagonist 70  
**MF:** C<sub>21</sub>H<sub>25</sub>N<sub>3</sub>O<sub>4</sub>S  
**FW:** 415.5  
**Purity:** ≥90%  
**UV/Vis.:** λ<sub>max</sub>: 234 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

SPA70 is supplied as a solid. A stock solution may be made by dissolving the SPA70 in the solvent of choice, which should be purged with an inert gas. SPA70 is soluble in the organic solvent chloroform at a concentration of approximately 10 mg/ml.

### Description

SPA70 is a pregnane X receptor (PXR) antagonist (IC<sub>50</sub> = 0.51 μM).<sup>1</sup> It is selective for PXR over 10 additional nuclear receptors at concentrations greater than 5 μM, as well as over a panel of 384 kinases at 10 μM. SPA70 (0.1-10 μM) inhibits PXR activation induced by rifampicin (Item No. 14423) in HEK293 cells expressing the human receptor. It also inhibits rifampicin-induced activity of the PXR target cytochrome P450 (CYP) isoform 3A4 (CYP3A4) in primary human hepatocytes. SPA70 (200 mg/kg) inhibits PXR agonist-induced CYP3A4-mediated metabolism of midazolam and paclitaxel (Item No. 10461) in human PXR transgenic (hPXR-tg) mice.

### Reference

1. Lin, W., Wang, Y.-M., Chai, S.C., *et al.* SPA70 is a potent antagonist of human pregnane X receptor. *Nat. Commun.* **8**(1), 741 (2017).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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