# **PRODUCT** INFORMATION GSK2850163



Item No. 40917

CAS Registry No.:	2121989-91-9.	
Formal Name:	2-[(3,4-dichlorophenyl)methyl]-N-[(4-	
	methylphenyl)methyl]-2,7-diazaspiro[4.5R]	
	decane-7-carboxamide	
Synonym:	GSK163	
MF:	C <sub>24</sub> H <sub>29</sub> Cl <sub>2</sub> N <sub>3</sub> O	
FW:	446.4	
Purity:	≥98%	
Supplied as:	A solution in ethanol	CI
Storage:	-20°C	
Stability:	≥3 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

### Laboratory Procedures

GSK2850163 is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO purged with an inert gas can be used. GSK2850163 is sparingly soluble (1-10 mg/ml) in DMSO.

### Description

GSK2850163 is an inhibitor of inositol-requiring enzyme 1 $\alpha$  (IRE1 $\alpha$ ; IC<sub>50</sub>s = 0.2 and 0.02  $\mu$ M for RNase and kinase activity, respectively).<sup>1</sup> It is selective for IRE1 $\alpha$  over Ron and FGFR1 (IC<sub>50</sub>s = 4.4 and 17  $\mu$ M), as well as a panel of 282 kinases at 10  $\mu$ M. GSK2850163 (8  $\mu$ M) inhibits endoplasmic reticulum (ER) stress-induced increases in the splicing of mRNA encoding X-box binding protein 1 (XBP1) in eight multiple myeloma cell lines. It reduces viral replication in tick-borne encephalitis virus-infected SH-SY5Y and SNB-19 cells when used at a concentration of 0.5  $\mu$ M or tick-borne encephalitis virus-infected Caco-2 cells at 1  $\mu$ M.<sup>2</sup>

### References

- 1. Concha, N.O., Smallwood, A., Bonnette, W., et al. Long-range inhibitor-induced conformational regulation of human IRE1 $\alpha$  endoribonuclease activity. Mol. Pharmacol. 88(6), 1011-1023 (2015).
- 2. Breitkopf, V.J.M., Dobler, G., Claus, P., et al. IRE1-Mediated unfolded protein response promotes the replication of tick-borne flaviviruses in a virus and cell-type dependent manner. Viruses 13(11), 2164 (2021).

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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