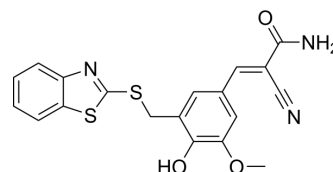


AG-825

Cat. No.:	HY-15844		
CAS No.:	149092-50-2		
Molecular Formula:	C ₁₉ H ₁₅ N ₃ O ₃ S ₂		
Molecular Weight:	397.47		
Target:	EGFR; Apoptosis		
Pathway:	JAK/STAT Signaling; Protein Tyrosine Kinase/RTK; Apoptosis		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : 250 mg/mL (628.98 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.5159 mL	12.5796 mL	25.1591 mL
		5 mM	0.5032 mL	2.5159 mL	5.0318 mL
10 mM		0.2516 mL	1.2580 mL	2.5159 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (5.23 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	AG-825 (Tyrphostin AG-825) is a selective and ATP-competitive ErbB2 inhibitor which suppresses tyrosine phosphorylation, with an IC ₅₀ of 0.35 μM. AG-825 displays anti-cancer activity ^{[1][2][3]} . AG825 significantly accelerates apoptosis of human neutrophils ^[4] . AG-825 is a potential agent for overcoming Mn-induced neurotoxicity or AD development ^[5] .	
IC₅₀ & Target	ErbB2 0.35 μM (IC ₅₀)	EGFR 19 μM (IC ₅₀)

REFERENCES

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- [4]. Rahman A, et al. Inhibition of ErbB kinase signalling promotes resolution of neutrophilic inflammation. *Elife*. 2019 Oct 15;8. pii: e50990.
- [5]. Gazit A, et al. Tyrphostins. 3. Structure-activity relationship studies of alpha-substituted benzylidenemalononitrile 5-S-aryltyrphostins. *J Med Chem*. 1993 Nov 12;36(23):3556-64.
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Caution: Product has not been fully validated for medical applications. For research use only.

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