产品名称：Tyrphostin AG 879
产品别名：AG 879

生物活性：

Description	Tyrphostin AG 879 (AG 879) is a tyrosine kinase inhibitor that inhibits TrKA phosphorylation (IC50 of 10 μM), but not TrKB and TrKC. Tyrphostin AG 879 is also a selective ErbB2 tyrosine kinase inhibitor with an IC50 of 1 μM, and has at least 500-fold higher selectivity to ErbB2 than EGFR. Tyrphostin AG 879 has anticancer activity[1][2][3].

In Vitro	Tyrphostin AG 879 (0.5-50 μM; 48 hours; HL-60, U-937, PC-3, HTB-82, HTB-114, TE-671, HTB-115 and HTB-88 cells) treatment significantly and dose dependently decreases cell proliferation in all the cell lines[1]. Tyrphostin AG 879 (0.5-50 μM; 48 hours; HL-60, U-937, PC-3, HTB-82, HTB-114, TE-671, HTB-115 and HTB-88 cells) treatment also induces a dose-dependent increase in apoptosis with the exception of the lines TE-671 and HTB-88 cells[1].	
	Cell Proliferation Assay	
	Cell Line:	HL-60, U-937, PC-3, HTB-82, HTB-114, TE-671, HTB-115 and HTB-88 cells [1]
	Concentration:	0.5 μM, 5 μM, 20 μM and 50 μM
	Incubation Time:	48 hours
	Result:	Significantly and dose dependently decreased cell proliferation in all the cell lines.
	Apoptosis Analysis	
	Cell Line:	HL-60, U-937, PC-3, HTB-82, HTB-114, TE-671, HTB-115 and HTB-88 cells [1]
	Concentration:	0.5 μM, 5 μM, 20 μM and 50 μM
	Incubation Time:	48 hours
	Result:	Induced a dose-dependent increase in apoptosis.
In Vivo	Tyrphostin AG 879 (100 mg/kg;subcutaneous injection; administered 10 times in 19 days; for 21 days; athymic, immunodepressed NOD/SCID female mice) treatment induces in vivo a decrease in cancer growth in grafted athymic NOD/SCID mice[1].	
	Animal Model:	Athymic, immunodepressed NOD/SCID female mice (20 g) with HTB-114 and HL-60 cells[1]
	Dosage:	100 mg/kg
	Administration:	Subcutaneous injection; administered 10 times in 19 days; for 21 days
	Result:	Resulted in dramatic reductions in tumor sizes.

Solvent&Solubility

In Vitro:

DMSO : ≥ 30 mg/mL (94.80 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.1600 mL	15.7998 mL	31.5996 mL
	5 mM	0.6320 mL	3.1600 mL	6.3199 mL
	10 mM	0.3160 mL	1.5800 mL	3.1600 mL

*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液；一旦配成溶液，请分装保存，避免反复冻融造成的产品失效。

储备液的保存方式和期限：-80°C, 6 months; -20°C, 1 month。-80°C 储存时，请在 6 个月内使用，-20°C

	储存时，请在 1 个月内使用。
References	[1]. Rende M et al. Role of nerve growth factor and its receptors in non-nervous cancer growth: efficacy of a tyrosine kinase inhibitor (AG879) and neutralizing antibodies antityrosine kinase receptor A and antinerve growth factor: an in-vitro and in-vivo study. Anticancer Drugs. 2006 Sep;17(8):929-41. [2]. Zhou Y et al. Blockade of EGFR and ErbB2 by the novel dual EGFR and ErbB2 tyrosine kinase inhibitor GW572016 sensitizes human colon carcinoma GEO cells to apoptosis. Cancer Res. 2006 Jan 1;66(1):404-11. [3]. Levitzki A, et al. Tyrosine kinase inhibition: an approach to drug development. Science. 1995 Mar 24;267(5205):1782-8.