产品名称：1-(3,6-Dibromo-carbazol-9-yl)-3-phenylamino-propan-2-ol
产品别名：P7C3

生物活性：

Description

P7C3 is a NAMPT activator. P7C3 can enhance learning and memory in aged rats. Protects newborn neurons in the dentate gyrus by mitigating cell death. In vitro: Administration of active P7C3 chemicals to cells treated with doxorubicin, which induces NAD depletion, led to a rebound in intracellular levels of NAD and concomitant protection from doxorubicin-mediated toxicity. In vivo: P7C3 is orally bioavailable, crosses the blood-brain barrier, and is non-toxic at doses several fold higher than the efficacious dose.An easily administered pro-neurogenic compound. The administration of P7C3 is 10mg/ kg(IP) in rats. Administration of P7C3 to normal mice, as well as npas3-/- mice, enhance survival of neurons subsequent to their birth in the SGZ.

Solvent&Solubility

In Vitro:

DMSO : ≥ 33 mg/mL (69.59 mM)

H_2O : < 0.1 mg/mL (insoluble)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.1089 mL	10.5443 mL	21.0886 mL
	5 mM	0.4218 mL	2.1089 mL	4.2177 mL
	10 mM	0.2109 mL	1.0544 mL	2.1089 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。

In Vivo:

请根据您的实验动物和给药方式选择适当的溶解方案。以下溶解方案都请先按照 **In Vitro** 方式配制澄清的储备液，再依次添加助溶剂：

——为保证实验结果的可靠性，澄清的储备液可以根据储存条件，适当保存；体内实验的工作液，建议您现用现配，当天使用； 以下溶剂前显示的百分比是指该溶剂在您配制终溶液中的体积占比；如在配制过程中出现沉淀、析出现象，可以通过加热和/或超声的方式助溶

1.请依序添加每种溶剂： 10% DMSO→40% PEG300 →5% Tween-80 → 45% saline

Solubility: ≥ 2.5 mg/mL (5.27 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (5.27 mM，饱和度未知) 的澄清溶液。

以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 400 μL PEG300 中，混合均匀；向上述体系中加入 50 μL Tween-80，混合均匀；然后继续加入 450 μL 生理盐水定容至 1 mL。

2.请依序添加每种溶剂： 10% DMSO →90% corn oil

Solubility: ≥ 2.5 mg/mL (5.27 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (5.27 mM，饱和度未知) 的澄清溶液，此方案不适用于实验周期在半个月以上的实验。

以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 900 μL 玉米油中，混合均匀。

[1]. Pieper AA et al. Discovery of a proneurogenic, neuroprotective chemical. Cell. 2010 Jul 9;142(1):39-51.

References	[2]. Wang G et al. P7C3 neuroprotective chemicals function by activating the rate-limiting enzyme in NAD salvage. Cell. 2014 Sep 11;158(6):1324-34. [3]. Pieper AA et al. P7C3 and an unbiased approach to drug discovery for neurodegenerative diseases. Chem Soc Rev. 2014 Oct 7;43(19):6716-26.