

产品名称：卡比多巴

产品别名：Carbidopa; (S)-(-)-Carbidopa

生物活性:																														
Description	Carbidopa is an inhibitor of DOPA decarboxylase, which is used in parkinson disease. Target: DOPA decarboxylase Carbidopa (CD), a competitive inhibitor of aromatic l-amino acid decarboxylase that does not cross the blood-brain barrier, is routinely administered with levodopa (LD) to patients with Parkinson disease (PD) to reduce the peripheral decarboxylation of LD to dopamine [1]. CD premedication improves 11C-5-HTP PET image quality and facilitates detection of NET lesions. Because of the similarity of metabolic pathways, this method could probably be applied to improve PET imaging using other tracers like 18F-DOPA and 11C-DOPA [2]. Carbidopa (100 microM) decreased growth of (but did not kill) SK-N-SH neuroblastoma and A204 rhabdomyosarcoma cells and did not affect proliferation of DU 145 prostate, MCF7 breast, or NCI-H460 large cell lung carcinoma lines. sublethal doses of carbidopa produced additive cytotoxic effects in carcinoid cells in combination with etoposide and cytotoxic synergy in SCLC cells when coincubated with topotecan [3].																													
	In Vitro: DMSO : 4 mg/mL (17.68 mM; Need ultrasonic and warming) H₂O : < 0.1 mg/mL (insoluble)																													
Solvent&Solubility	Preparing Stock Solutions	<table border="1"><thead><tr><th>Solvent</th><th>Mass</th><th>1 mg</th><th>5 mg</th><th>10 mg</th></tr><tr><th>Concentration</th><th></th><th></th><th></th><th></th></tr></thead><tbody><tr><td>1 mM</td><td></td><td>4.4203 mL</td><td>22.1014 mL</td><td>44.2028 mL</td></tr><tr><td>5 mM</td><td></td><td>0.8841 mL</td><td>4.4203 mL</td><td>8.8406 mL</td></tr><tr><td>10 mM</td><td></td><td>0.4420 mL</td><td>2.2101 mL</td><td>4.4203 mL</td></tr></tbody></table>	Solvent	Mass	1 mg	5 mg	10 mg	Concentration					1 mM		4.4203 mL	22.1014 mL	44.2028 mL	5 mM		0.8841 mL	4.4203 mL	8.8406 mL	10 mM		0.4420 mL	2.2101 mL	4.4203 mL			
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*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]. Durso, R., et al., Variable absorption of carbidopa affects both peripheral and central levodopa metabolism. J Clin Pharmacol, 2000. 40(8): p. 854-60.																													
	[2]. Orlefors, H., et al., Carbidopa pretreatment improves image interpretation and visualisation of carcinoid tumours with 11C-5-hydroxytryptophan positron emission tomography. Eur J Nucl Med Mol Imaging, 2006. 33(1): p. 60-5.																													
	[3]. Gilbert, J.A., L.M. Frederick, and M.M. Ames, The aromatic-L-amino acid decarboxylase inhibitor carbidopa is selectively cytotoxic to human pulmonary carcinoid and small cell lung carcinoma cells. Clin Cancer Res, 2000. 6(11): p. 4365-72.																													