



上海源叶生物科技有限公司
Shanghai yuanye Bio-Technology Co., Ltd
电话: 021-61312973 传真: 021-55068248
网址: www.shyuanye.com
邮箱: shyysw@sina.com

产品名称: **Phe-Met-Arg-Phe amide trifluoroacetate**

产品别名: **Phe-Met-Arg-Phe amide trifluoroacetate**

生物活性:				
Description	Phe-Met-Arg-Phe amide trifluoroacetate is an activator of K ⁺ current, with ED ₅₀ of 23 nM in the peptidergic caudodorsal neurons.			
IC ₅₀ & Target	ED ₅₀ : 23 nM (K ⁺ current) ^[1]			
In Vitro	In the molluscan central nervous system, Phe-Met-Arg-Phe amide (FMRFa) acts on K ⁺ channels in sensory, motor-, and neuroendocrine neurones. Phe-Met-Arg-Phe amide activates a novel K ⁺ current that is characterized by a combined voltage- and receptor-dependent gating mechanism, with both factors being necessary for opening of the channels ^[1] . Phe-Met-Arg-Phe amide (1 μM) significantly inhibits glucose stimulated (300 mg/dL) insulin release (p<0.005) and somatostatin release (p<0.01) from the isolated perfused pancreas. Phe-Met-Arg-Phe amide (FMRF-NH ₂) (1 and 10 μM) is without effect on glucagon secretion, either in low glucose (50 mg/dL), high glucose (300 mg/dL), or during arginine stimulation (5 mM) ^[2] .			
In Vivo	Phe-Met-Arg-Phe amide (FMRFamide) stimulates growth hormone secretion in conscious OVX rats. The presence of Phe-Met-Arg-Phe amide-like immunoreactivity in neuronal elements in the hypothalamus suggested a role for this in the hypothalamic control of the anterior pituitary function. The injection of 200 ng (313.8 picomoles) of FMRFamide (in 2 μL) produces a significantly increased plasma GH 15 min after injection. The GH-increasing effect of 400-800 ng (627-1255 picomoles) of FMRFamide is already developed after 5 min and lasted up to 30 min ^[3] .			
Solvent&Solubility	In Vitro: H₂O : ≥ 50 mg/mL (60.47 mM) * "≥" means soluble, but saturation unknown.			
		Solvent Mass Concentration	1 mg	5 mg
	Preparing	1 mM	1.2095 mL	6.0473 mL
	Stock Solutions	5 mM	0.2419 mL	1.2095 mL
		10 mM	0.1209 mL	0.6047 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]. Kits KS, et al. Phe-Met-Arg-Phe-amide activates a novel voltage-dependent K ⁺ current through a lipoygenase pathway in molluscan neurones. J Gen Physiol. 1997 Nov;110(5):611-28. [2]. Sorenson RL, et al. Phe-met-arg-phe-amide (FMRF-NH ₂) inhibits insulin and somatostatin secretion and anti-FMRF-NH ₂ sera detects pancreatic polypeptide cells in the rat islet. Peptides. 1984 Jul-Aug;5(4):777-82. [3]. Ottlecz A, et al. Phe-Met-Arg-Phe-amide (FMRFamide) stimulated growth hormone secretion in conscious OVX rats. Neuropeptides. 1987 Feb-Mar;9(2):161-7.			