

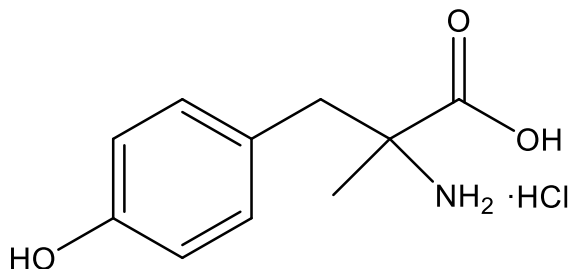
Catalog # 10-4647

SM-88

CAS# 30625-05-9

2-Amino-3-(4-hydroxyphenyl)-2-methylpropionic acid hydrochloride; Racemetyrosine·HCl; DL-alpha-methyltyrosine·HCl

Lot # FBA8079



SM-88 is a “dysfunctional” tyrosine mimetic. It is taken up by cancer cells and disrupts tyrosine-mediated metabolic pathways including synthesis of the important protein mucin-1 leading to oxidative stress.¹ In clinical trials with melanin, phenytoin, and sirolimus (SMK therapy) for use in advanced metastatic cancer², in combination with methoxsalen, phenytoin, and sirolimus (MPS therapy) for prostate cancer³, and as monotherapy for metastatic pancreatic cancer⁴. It is also an inhibitor of tyrosine hydroxylase resulting in a reduction of catecholamines and their metabolites.⁵

- 1) Lemberg *et al.* (2022), *Clinical development of metabolic inhibitors for oncology*; J. Clin. Invest., **132** e148550
- 2) Stega *et al.* (2020), *A first-in-human study of the novel metabolism-based anti-cancer agent SM-88 in subjects with advanced metastatic cancer*; Invest. New Drugs, **38** 392
- 3) Gartell *et al.* (2021), *Phase II trial of SM-88, a cancer metabolism based therapy, in non-metastatic biochemical recurrent prostate cancer*; Invest. New Drugs, **39** 499
- 4) Noel *et al.* (2019), *Phase II trial of SM-88 in patients with metastatic pancreatic cancer: Preliminary results of the first stage* J. Clin. Oncol., **37** 200
- 5) Brogden *et al.* (1981), *alpha-Methyl-p-tyrosine: a review of its pharmacology and clinical use*; Drugs, **21** 81

PHYSICAL DATA

Molecular Weight:	231.68
Molecular Formula:	C ₁₀ H ₁₃ NO ₃ ·HCl
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (at least 50 mg/ml); ethanol (at least 35 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied desiccated at room temperature for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months. Hygroscopic solid – protect from moisture.

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