



Technical Data Sheet:

EMRICASAN

Catalog Number	SML21A. SML21B
Synonyms	PF 03491390; IDN-6556
Size	5 mg or 10 mg
Description	Emricasan is an irreversible and highly selective pan-caspase inhibitor, demonstrating irreversible inhibition and a significant first-pass effect (Tian J, et al). Emricasan has been found to directly improve hepatocytes phenotype in primary rat cirrhotic hepatocytes and has hepatoprotective effects in human liver cells (Barreyro et al). In combination with birinapan this small molecule is used to treat acute myeloid leukemia (AML). (Brumatti G, et al.)
Molecular Weight	569.50
Molecular Formula	$C_{26}H_{27}F_4N_3O_7$
Chemical Name	L-Alaninamide, N-[2-(1,1-dimethylethyl) phenyl]-2-oxoglycyl-N-[(1S)-1-(carboxymethyl)-2-oxo-3-(2,3,5,6-tetrafluorophenoxy) propyl]-
CAS Number	254750-02-2
Target	Caspase; Apoptosis
Appearance	White to off-white (Solid)
Purity	≥98% by LCMS
Solubility and Reconstitution	Soluble in DMSO up to 73.75mM, for example: 10 mg/87.797 mL = 0.114 mg/mL = 0.2 mM 10 mg/ 17.5593 mL = 0.569 mg/mL = 1 mM 10 mg/ 3.5119 mL = 2.847 mg/mL = 5 mM 10 mg/ 1.7559 mL = 5.695 mg/mL = 10 mM
Storage Temperature and Stability	Powder: -20°C 3 years 4°C 2 years In solvent: -80°C 6 months -20°C 1 month
References	Barreyro FJ, et al. The pan-caspase inhibitor Emricasan (IDN-6556) decreases liver injury and fibrosis in a murine model of non-alcoholic steatohepatitis. Liver Int. 2015 Mar;35(3):953-66 Brumatti G, et al. The caspase-8 inhibitor emricasan combines with the SMAC mimetic birinapan to induce necroptosis and treat acute myeloid leukemia. Science Translational Medicine, 2016; 8, 339ra69-339ra69 Tian J, et al. Combination of Emricasan with Ponatinib Synergistically Reduces Ischemia/Reperfusion Injury in Rat Brain Through Simultaneous Prevention of Apoptosis and Necroptosis. Transl Stroke Res. 2017 Nov 4.