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Product Datasheet

Pemetrexed, CAS [[357166-29-1]]
FBM-10-2162

Article Name	Pemetrexed, CAS [[357166-29-1]]
Biozol Catalog Number	FBM-10-2162
Supplier Catalog Number	10-2162
Alternative Catalog Number	FBM-10-2162-10MG,FBM-10-2162-50MG
Manufacturer	Focus Biomolecules
Category	Biochemikalien
Product Description	Antifolate, antitumor agent...
Molecular Weight	597.49
Purity	98% by TLC and HPLC, NMR (Conforms)
Form	White solid
CAS Number	[357166-29-1]
Formula	C20H19N5O6 2Na 7H2O
Application Notes	Pemetrexed is a multi-targeted antifolate with antitumor activity. It potently inhibits folate-dependent enzymes involved in both purine and pyrimidine synthesis including thymidylate synthase ($K_i = 109$ nM), dihydrofolate reductase ($K_i = 7$ nM), glycinamide ribonucleotide formyltransferase ($K_i = 9.3$ μM), and aminoimidazole carboxamide ribonucleotide formyltransferase ($K_i = 3.6$ μM).¹ A clinically useful anticancer agent.² Indirectly activates the metabolic kinase AMPK and consequently influences the mTORC1 pathway in human carcinomas.³ Activation of AMPK is associated with pemetrexed resistance.⁴ Induces G0/G1-phase cell cycle arrest in esophageal squamous cell carcinoma cells.⁵