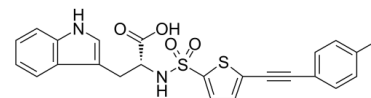


## Data Sheet

Product Name:	S 3304
Cat. No.:	CS-0027075
CAS No.:	203640-27-1
Molecular Formula:	C <sub>24</sub> H <sub>20</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub>
Molecular Weight:	464.56
Target:	MMP
Pathway:	Metabolic Enzyme/Protease
Solubility:	H <sub>2</sub> O : < 0.1 mg/mL (insoluble); DMSO : ≥ 83.3 mg/mL (179.31 mM)



### BIOLOGICAL ACTIVITY:

S 3304 is a novel **matrix metalloproteinases (MMP)** inhibitor specific for **MMP-2** and **MMP-9**. IC<sub>50</sub> & Target: MMP-2, MMP-9<sup>[1]</sup> **In Vitro:** S 3304 is a novel D-tryptophan derivative and a potent, orally active, noncytotoxic Matrix metalloproteinases inhibitor (MMPI). Biochemical studies show that S 3304 most potently inhibits the activities of MMP-2 and MMP-9 but does not inhibit MMP-1, MMP-3, or MMP-7 and may, therefore, lack the musculoskeletal side effects seen with nonspecific inhibitors<sup>[1]</sup>. **In Vivo:** In vivo pharmacologic studies have shown that the oral administration of S 3304, at a dose range of 20 to 200 mg/kg, inhibits angiogenesis, artificially induced in mice by the dorsal air-sac method. Similar oral doses of S 3304 result in potent inhibition of metastatic lung colonization of Lewis murine lung carcinoma injected via tail vein and liver metastasis of C-1H human colon cancer implanted into the spleen<sup>[1]</sup>.

### References:

[1]. Chiappori AA, et al. A phase I pharmacokinetic and pharmacodynamic study of s-3304, a novel matrix metalloproteinase inhibitor, in patients with advanced and refractory solid tumors. Clin Cancer Res. 2007 Apr 1;13(7):2091-9.

### CAS Index Names:

D-Tryptophan, N-[[5-[2-(4-methylphenyl)ethynyl]-2-thienyl]sulfonyl]-

### SMILES:

O=S(N[C@@H](C(O)=O)CC1=CNC2=C1C=CC=C2)(C3=CC=C(C#CC4=CC=C(C(C)=C4)S3)=O

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA