

# **Product Introduction**

## GF109203X

GF109203X is a potent **PKC** inhibitor with **IC50** of 20 nM, 17 nM, 16 nM, and 20 nM for PKCa, PKCβI, PKCβII, and PKCγ, respectively, showing more than 3000-fold selectivity for PKC as compared to EGFR, PDGFR and insulin receptor.

#### **Technical Data:**

| Molecular<br>Weight<br>(MW):         | 412.48  |  |
|--------------------------------------|---|--|
| Formula:                             | C <sub>25</sub> H <sub>24</sub> N <sub>4</sub> O <sub>2</sub> |  |
| Solubility<br>(25°C)                 | DMSO 82 mg/mL   |  |
| * <1 mg/ml<br>means                  | Water <1 mg/mL  |  |
| slightly<br>soluble or<br>insoluble: | Ethanol <1 mg/mL  |  |
| Purity:                              | >98%  |  |
| Storage:                             | 3 years -20℃ Powder   |  |
|                                      | 6 months-80℃in DMSO   |  |
| CAS No.:                             | 133052-90-1   |  |

### **Biological Activity**

GF109203X, as an ATP-competitive PKC inhibitor, prevents platelet aggregation induced by stimuli that activate PKC, and has the potential as a tool for studying the involvement of PKC in signal transduction pathways. [1] GF 109203X produces reversal activity on P-glycoprotein and MRP -mediated multidrug resistance. [2] [3] PKC inhibition by GF109203X significantly reduces carbachol-stimulated ERK1/2 activation and the subsequent proliferation of SNU-407 colon cancer cells. [4]

Note: Products protected by valid patents are not offered for sale in countries where the sale of such products constitutes a patent infringement and its liability is at buyer's risk. This item is only for R&D purpose not for commercial business in kilos. Buyers should overview the patent issue in their countries.

Greater selectivity than PKC inhibitor staurosporine. GF109203X is a chemical probe for studying PKC signal transduction pathways. Potential for use in a variety of cancers.

#### References

- [1] Toullec D, et al. J Biol Chem. 1991, 266(24), 15771-15781.
- [2] Gekeler V, et al. Br J Cancer. 1996, 74(6), 897-905.
- [3] Gekeler V, et al. Biochem Biophys Res Commun. 1995, 206(1), 119-126.
- [4] Park YS, et al. Mol Cell Biochem. 2012, 370(1-2), 191-198.



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