

## Inhibitorset for Protein Kinases A, G, C

### 1. Description

Ligand set contains inhibitors which are specific for the AGC family (H8, H89, HA-1004, HA-1077) and staurosporine as a general protein kinase inhibitor. The products are predissolved in DMSO at a stock concentration of 10 mM in 50 µl.

### 2. Product Information

Inhibitor	Description		Selectivity
H8 PKI-H008	Chemical name	N-[2-(Methylamino)ethyl]-5-isoquinolinesulfonamide .2 HCl	PKA (IC50 ~ 1,2 µM)
	Formula	C <sub>12</sub> H <sub>15</sub> N <sub>3</sub> O <sub>2</sub> S . 2HCl	PKG (IC50 ~ 0,5 µM)
	Molecular Weight	265.3 + 73.0 g/mol	PKC (IC50 ~ 14 µM)
H89 PKI-H089	Chemical name	N-[2-(p-Bromocinnamylamino) ethyl]-5-isoquinolinesulfonamide	PKA (IC50 ~ 50 nM)
	Formula	C <sub>20</sub> H <sub>20</sub> BrN <sub>3</sub> O <sub>2</sub> S	PKG (IC50 ~ 35 nM)
	Molecular Weight	446.4 g/mol	PKC (IC50 ~ 14 µM)
HA-1004 PKI-HA1004	Chemical name	N-(2'-Guanidinoethyl)-5-isoquinoline-sulfonamide dihydrochloride	PKA (IC50 ~ 2,3 µM)
	Formula	C <sub>12</sub> H <sub>15</sub> N <sub>5</sub> O <sub>2</sub> S . 2HCl	PKG (IC50 ~ 1,3 µM)
	Molecular Weight	293.3 + 73.0 g/mol	PKC (IC50 ~ 40 µM)
HA-1077 PKI-HA1077	Chemical name	1-(5-Isoquinolinesulfonyl)-1H-hexahydro-1,4-diazepine.2 HCl	PKA (IC50 ~ 1,6 µM)
	Formula	C <sub>14</sub> H <sub>17</sub> N <sub>3</sub> O <sub>2</sub> S*2HCl	PKG (IC50 ~ 1,6 µM)
	Molecular Weight	364.4 g/mol	
Staurosporine PKI-STSP	Chemical name	Staurosporine from Streptomyces staurosporeus, antibiotic AM-2282	PKA (IC50 ~ 6 nM)
	Formula	C <sub>28</sub> H <sub>26</sub> N <sub>4</sub> O <sub>3</sub>	PKG (IC50 ~ 8,5 nM)
	Molecular Weight	466.5 g/mol	PKC (IC50 ~ 7 nM)

### 3. Product specific literature references:

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- Tamaoki T, Nomoto H, Takahashi I, Kato Y, Morimoto M, Tomita F (1986) "Staurosporine, a potent inhibitor of phospholipid/Ca<sup>++</sup>-dependent protein kinase" *Biochem. Biophys. Res. Commun*. 135(2):397-402
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