



## Product Information

**Axon ID:** 5011 **Batch:** 1

**Product Name:** Naive Stem Cell 5i Inhibitor Set

**Content:** Set of 5 inhibitors: SB590885, PD0325901, Y27632, WH-4-023 and IM-12

\* Size of Set: 2 mg or 5 mg of each inhibitor in the set, individually packed into a glass vial (1.5 mL, screw cap with Silicone/PTFE septa or 4 mL with crew cap).

\* All inhibitors are in powder form (high purity: 99%), ready to be reconstituted freshly to their 10 mM solutions in DMSO respectively.

**Description:** A convenient set of five small molecule pathway inhibitors (termed as Naive stem cell 5i inhibitors):

- BRAF inhibitor SB590885 (Axon 2504)
- MEK inhibitor PD0325901 (Axon 1408)
- ROCK inhibitor Y27632 dihydrochloride (Axon 1683)
- SRC/LCK inhibitor WH 4-023 (Axon 2381)
- GSK3 $\beta$  inhibitor IM-12 (Axon 2511)

(\*Alternatively, CHIR99021 (Axon 1386) can be used as GSK3 $\beta$  inhibitor. Not included.)

The combination of five inhibitors of MEK, GSK3 $\beta$ , BRAF, ROCK, and SRC, supports the expansion of viable OCT4- $\Delta$ PE-GFP+ human pluripotent cells after exogenous transcription factor expression has been removed. Useful tool for the induction and maintenance of human naive stem cell pluripotency.

Axon ID	Component	Set Size (2 mg each)	Set Size (5 mg each)	Batch	Batch MW
2504	SB 590885	1 vial x 2 mg	1 vial x 5 mg	B1	462.55
1408	PD0325901	1 vial x 2 mg	1 vial x 5 mg	B7	482.19
1683	Y27632 dihydrochloride	1 vial x 2 mg	1 vial x 5 mg	B10	324.76
2381	WH 4-023	1 vial x 2 mg	1 vial x 5 mg	B2	568.67
2511	IM-12	1 vial x 2 mg	1 vial x 5 mg	B1	377.41

**Stock Solution:** Instruction to prepare stock solution in DMSO:  
 10 mM solution of SB590885 (2 mg in 432  $\mu$ L; 5 mg in 1081  $\mu$ L DMSO);  
 10 mM solution of PD0325901 (2 mg in 410.9  $\mu$ L; 5 mg in 1027.3  $\mu$ L DMSO);  
 10 mM solution of Y27632 dihydrochloride (2 mg in 599.2  $\mu$ L; 5 mg in 1498.0  $\mu$ L DMSO or H<sub>2</sub>O)  
 10 mM solution of WH4-023 (2 mg in 352  $\mu$ L; 5 mg in 879  $\mu$ L DMSO);  
 10 mM solution of IM-12 (2 mg in 530  $\mu$ L; 5 mg in 1325  $\mu$ L DMSO or H<sub>2</sub>O)  
 (\*Samples in solutions can be provided upon your request. Please contact us.)

**Storage:** 4 °C or below for samples in powder form; their DMSO or H<sub>2</sub>O stock solutions, once prepared, can be stored at -20 °C and below for 6 months. Our recommendation is to use it freshly within 1 month. Protect from light and air!

**Shipping:** Powder samples can be shipped at ambient temperature.

**Reference:** Theunissen, T.W. et al. Systematic identification of culture conditions for induction and maintenance of naive human pluripotency. Cell Stem Cell. 2014 Oct 2; 15(4): 471-487.

**Source Information:** The featured inhibitors from Axon Medchem have been widely procured as drug standards for generating reliable and reproducible biological data, evidenced by many publications. All 5i are highly pure drugs ideally for using in stem cell research. Be right about your drugs!