## Stem cell Differentiation Compound Library

Catalog No: #L8000



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Description	Support: tech@signalwayantibody.com
Product Name	Stem cell Differentiation Compound Library
Brief Description	Stem cellscandifferentiateinto other types of cells and candivideto produce more of the same type of stem
	cells. For example, embryonic stem cells can differentiate into all the specialized cellso $\Omega \frac{1}{2}$ or $\Omega \frac{1}{2}$ ectoderm,
	endoderm and mesoderm. Somatic stem cells are thought to be limited to differentiating into different celltypes
	of their tissue of origin. To generate enough specialized cells or tissues that can be used for specific purposes
	such astissue regeneration, cell-based therapies, drug screening, or disease models, scientists (must control
	the cell fate of pluripotent stem cells) are currently working on methods to effectively differentiate stem cells into
	functional specializedcells. Natural and synthetic small molecules have been shown to be useful chemical
	tools for controlling and manipulating the fates of cells. For example, Glycogen synthase kinase $3o\Omega\%o\Omega\%$
	$(\text{GSK-3o}\Omega 1\!\!/_{\!\!2}\text{o}\Omega 1\!\!/_{\!\!2}) \text{ inhibitor could induce differentiation of neural progenitor cells (NPCs)}. \ Bone \ marrow \ stromal$
	stem cells (BMSSCs) may have potential to differentiate in vitro and in vivo into hepatocytes following the
	treatment of inhibitor of histone deacetylase and some well-defined cytokines.
	Stem Cell Differential Compound Library from SAB, a unique collection of 340 stem cell differentiation
	signaling targeted compounds, can be used for stem cell research and related drug screening (high
	throughput and high content screening).
Storage	Powder or pre-dissolved DMSO solutions in 96 well plate with optional 2D barcodeShipped with sky ice;
	Stable for One year as powder, 6 months at - 20 ° C in DMSO or 12months at -80 ° C in DMSO

## **Application Details**

Number of Compounds:340

## **Product Description**

A unique collection of 340 stem cell differentiation signaling targeted compounds for high throughput and high content screening; Effective tool for research in regenerative medicine, stem cell differentiation signaling, and drug screening based on stem cells; Targets include Wnt, GSK-2, Hedgehog, JAK, ROCK,  $o\Omega\frac{1}{2}o\Omega\frac{1}{2}$ -secretase, etc.; Detailed compound information with structure, target, activity, IC50 value, and biological activity description; Structurally diverse, medicinally active, and cell permeable; NMR and HPLC validated to ensure high purity and quality

Note: This product is for in vitro research use only