

## **Wnt Protein Stabilizer**

Catalog Number: bWps

**Source:** Mammalian proteins

**Application:** For stabilization of Wnt proteins in serum free culture conditions

**Description** In serum free culture conditions, Wnt proteins are very unstable. Wnt3a losses its

activity completely in 16 hours. The instability of Wnt proteins limits their applications,

especially the application for stem cell and organoid culture.

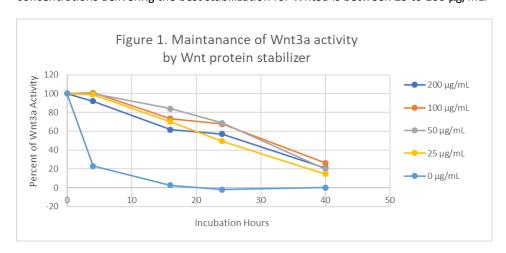
The Wnt protein stabilizer significantly maintains Wnt activity in serum free culture conditions for 24 hours. With the presence of Wnt protein stabilizer, purified Wnt3a can

support even colon organoid culture that needs strong Wnt activity.

**Concentration** About 20 mg/mL of proteins and other components

Activity: Effects of the Wnt protein stabilizer on Wnt3a bioactivity has been measured using TCF-

based Wnt reporter assay. Wnt3a (50 ng/mL) was incubated in 37 °C, 5%  $CO_2$  incubator in serum-free DMEM in the presence of various concentrations of the Wnt protein stabilizer for various periods. Wnt3a activity was measured using TCF-based Wnt reporter stable cell line (Time Bioscience Catalog: WRNIH3T3A). Wnt3a completely lost its bioactivity within 16 hours with a half-life of 2 hours (Figure 1). Whereas, the Wnt protein stabilizer maintains Wnt3a bioactivity to almost 30 hours. The half-life of Wnt3a in the presence of the Wnt protein stabilizer is about 24-30 hours. The range of concentrations delivering the best stabilization for Wnt3a is between 25 to  $100 \mu g/mL$ .



**Formulation** Proprietary formula.

Handling and Storage

Store at 2° - 8°C for months and below -20 °C for years.

Reference N/A