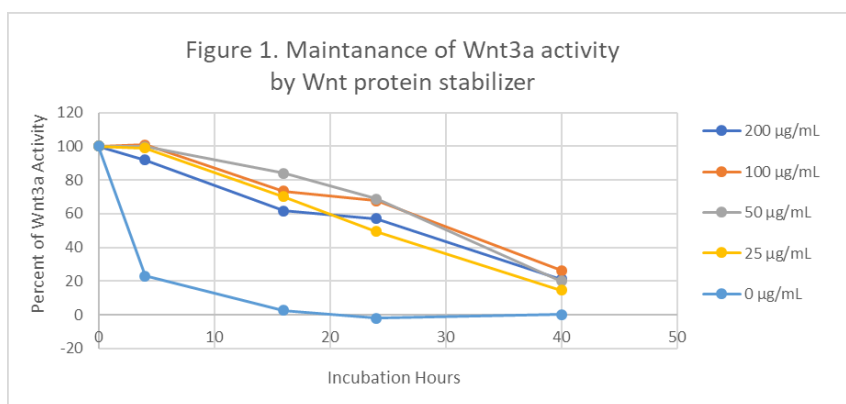




## Wnt Protein Stabilizer

<b>Catalog Number:</b>	bWps
<b>Source:</b>	Mammalian proteins
<b>Application:</b>	For stabilization of Wnt proteins in serum free culture conditions
<b>Description</b>	<p>In serum free culture conditions, Wnt proteins are very unstable. Wnt3a loses its activity completely in 16 hours. The instability of Wnt proteins limits their applications, especially the application for stem cell and organoid culture.</p> <p>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.</p>
<b>Concentration</b>	20 mg/mL of proteins and other components
<b>Activity:</b>	<p>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<sub>2</sub> 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 µg/mL.</p>



<b>Formulation</b>	Proprietary formula.
<b>Handling and Storage</b>	<p>Store at 2° - 8°C for months and below -20 °C for years.</p> <p>This Wnt protein stabilizer is (designed) specially for protecting Wnt proteins from losing their activity in serum-free medium, such as in stem cell or organoid cultures. To use it, take an aliquot calculated based on the volume of culture medium and add it into culture medium before or after addition of Wnt proteins; mix well but no vortex. The stock concentration is 20 mg/mL and the working concentrations are 25 to 100 µg/mL.</p>
<b>Reference</b>	N/A