



Recombinant Human Wnt5b

Catalog Number:	rhW5bL
Source:	Human cell line-derived
Sequences:	Gln18-Lys359
Synonyms:	Protein Wnt-5B; wingless-type MMTV integration site family, member 5B; WNT5B
Purity:	75 % evaluated by SDS-PAGE under reducing conditions
Predicted M.W.:	38 kDa
Actual M.W.:	45 kDa evaluated by SDS-PAGE under reducing conditions
Description	<p>The WNT gene family consists of structurally related genes that encode secreted signaling proteins. These proteins have been implicated in oncogenesis, adipogenesis, etc. and in several other developmental processes, including regulation of cell fate and patterning during embryogenesis. Protein Wnt5b is a protein that is encoded by the WNT5B gene. This gene is a member of the non-canonical WNT gene family. Wnt5b protein can inhibit TCF-based Wnt signaling.</p> <p>This protein was purified using a combination of ion exchange, affinity column with Wnt signaling inhibitor-bound sepharose beads, and followed by gel filtration.</p>
Concentration	10-100 µg/mL. Please refer to the concentration on the label of each vial

Activity:	The inhibitory activity of Wnt5b on the canonical Wnt pathway has been measured using TCF-based Wnt reporter stable cell line (Catalog: WRNIH3T3A) stimulated by mouse Wnt3a. IE ₅₀ of Wnt5b is about 50 - 100 ng/mL in the presence of 1 ng/mL of mouse Wnt3a.
Formulation	Phosphate buffer pH 7.4-7.6, 1% CHAPS, 0.1% BSA.
Handling and Storage	<p>Keep the protein frozen until use. Refreeze aliquots at -20°C or below but avoid freeze-thaw circles.</p> <p>To treat cell lines, dilute the protein solution at least 200 times in medium; to treat stem cells, dilute the protein solution at least 500 times in medium. Diluted Wnt proteins in medium or phosphate buffer can be stored at 4°C for few days only.</p> <p>Mix the protein by pipetting up and down but not by vortexing.</p>
Reference	<p>Nicnboim J., et al., Lymphatic vessels arise from specialized angioblasts within a venous niche. <i>Nature</i> 522, 56–61.</p> <p>Kanazawa A., et al., Wnt5b partially inhibits canonical Wnt/β-catenin signaling pathway and promotes adipogenesis in 3T3-L1 preadipocytes. <i>Biochemical and Biophysical Research Communications</i> 2005; 330: 505–510.</p>