

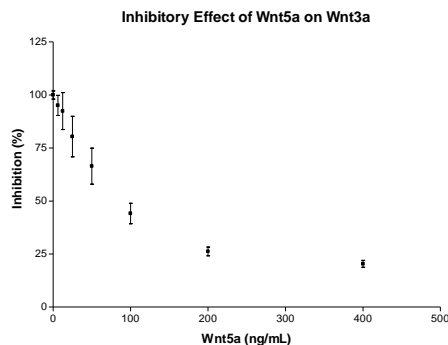


Recombinant Human/Murine Wnt5a

Catalog Number:	rhmW5aL
Source:	Chinese Hamster Ovary (CHO) cell line-derived
Sequences:	Gln38-Lys380
Synonyms:	Protein Wnt-5a; wingless-type MMTV integration site family, member 5A; WNT5A
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 Wnt5a is a protein that is encoded by the WNT5A gene. This gene is a member of the non-canonical WNT gene family. Mature mouse Wnt5a is 100% identical in amino acids to mature human Wnt5a after being secreted from expression cells. Wnt5a protein can inhibit or activate 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 tube

Activity:

The inhibitory activity of Wnt5a 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 Wnt5a is about 50 - 100 ng/mL in the presence of 1 -2 ng/mL of mouse Wnt3a.

**Formulation**

Phosphate buffer pH 7.4-7.6, 1% CHAPS, 0.1% BSA.

Handling and Storage

Keep the protein frozen until use. Refreeze aliquots at -20°C or below but avoid freeze-thaw circles.

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.

Mix the protein by pipetting up and down but not by vortexing.

Reference

Bauer M., et al. WNT5A Encodes Two Isoforms with Distinct Functions in Cancers. PLoS ONE 8(11): e80526.

Janda CY., et al. Structural basis of Wnt recognition by Frizzled. Science. 2012; 337(6090): 59–64.

Milkels AJ, et al. Purified Wnt5a Protein Activates or Inhibits β -Catenin–TCF Signaling Depending on Receptor Context. PLoS Biol, 4: e115, 2006