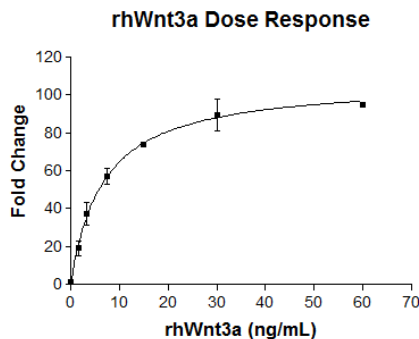




## Recombinant Human Wnt3a

---

<b>Catalog Number:</b>	rhW3aH
<b>Source:</b>	Human cell line-derived
<b>Sequences:</b>	Ser19-Lys352
<b>Synonyms:</b>	Protein Wnt-3a; wingless-type MMTV integration site family, member 3A; WNT3A
<b>Purity:</b>	85-90 % evaluated by SDS-PAGE under reducing conditions
<b>Predicted M.W.:</b>	37 kDa
<b>Actual M.W.:</b>	41 kDa evaluated by SDS-PAGE under reducing conditions
<b>Description</b>	<p>Protein Wnt-3a is a protein that is encoded by the WNT3A gene. 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. This gene is a member of the WNT gene family. Human Wnt3a shows 96% amino acid identity to mouse Wnt3a protein.</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>
<b>Concentration</b>	10-100 µg/mL Please refer to the concentration on the label of each tube
<b>Activity:</b>	Wnt3a activity has been measured using TCF-based Wnt reporter stable cell line (Catalog: WRHEK293A-HWR). 10 ng/mL of Wnt3a (Lot: 17Feb2016) generate 50-fold increase of luciferase activity compared to control (buffer without 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  $-20^{\circ}\text{C}$  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  $4^{\circ}\text{C}$  for few days only.

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

**Reference**

Desheng Lu and Dennis A. Carson. Inhibition of Wnt signaling and cancer stem cells. *Oncotarget* 2011; 2: 587 – 587

Taranjit S. Gujral, et al. A Noncanonical Frizzled2 Pathway Regulates Epithelial-Mesenchymal Transition and Metastasis. *Cell* 2014; 159: 844–856

Michael Kahn. Can we safely target the WNT pathway? *Nature Reviews Drug Discovery* 2014; 13: 513–532