

# Recombinant Human Wnt3A

Catalog Number: **HZ-1296**

HEK293 expressed

Endotoxin-free

Animal-component free

## Technical Specifications

Species	human
Expression	HEK293
Activity	Typically $\leq 20$ ng/mL EC50
Purity	>90%
Endotoxin	<1 EU/ $\mu$ g
Molecular Mass	38-42 kDa
Formulation	1x PBS pH 7.4 + 500mM NaCl +1% CHAPS, See Certificate of Analysis for details
Gene ID	89780

## Reconstitution Buffer

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein to  $\leq 100\mu$ g/mL in sterile 1x PBS containing 0.1% endotoxin-free recombinant human serum albumin (HSA).

## Stability and Storage

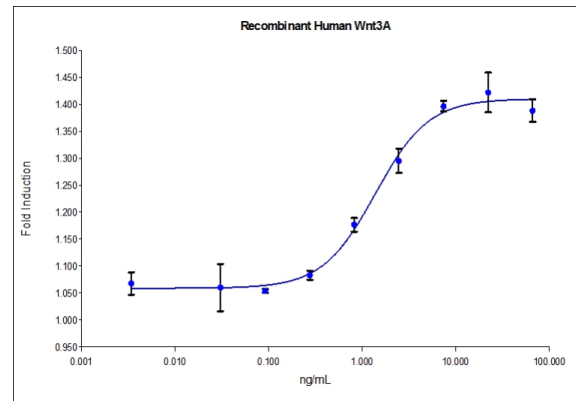
Lyophilized proteins are stable for 1 year from the date of receipt if stored between (-20°C) and (-80°C). Upon reconstitution we recommend that the solution can be stored at (4°C) for short term or at (-20°C) to (-80°C) for long term. Repeated freeze thaw cycles should be avoided with reconstituted products.

## Product Description

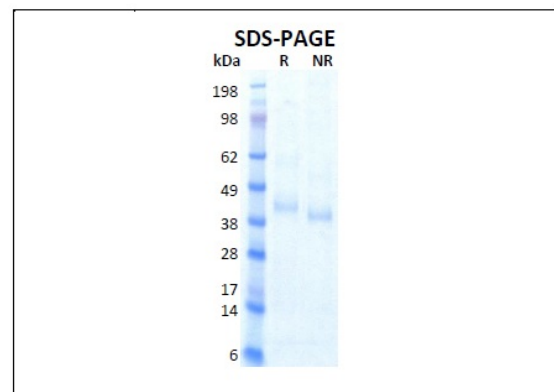
Recombinant Human Wnt3A is a member of the Wnt gene family that consists of structurally linked genes that encode secreted signaling proteins. These proteins are associated with oncogenesis and in numerous developmental processes. These processes include regulation of cell fate and patterning during embryogenesis. Human Wnt3A is a protein which shows 84% identity relative to other human Wnt3 proteins. Wnt3A plays a key role in maintaining the integrity of embryonic and adult tissues. The post-translational glycosylation and acylation of Wnts are essential for their efficient secretion and biological activity.

## Synonyms

Protein Wnt 3a, WNT3A



Recombinant human Wnt3A ( Catalogue: HZ-1296) stimulates dose-dependent induction of alkaline phosphatase production in the MC3T3-E1 mouse preosteoblast cell line. Alkaline phosphatase production was assessed using pNPP as a chromogenic substrate. MC3T3-E1 cells were treated with recombinant human Wnt3A for 72 hrs hours before lysis and addition of pNPP. EC50 is less than 20 ng/mL as determined by a 4 parameter non-linear regression model.



The protein was resolved by SDS-polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue.

## References

- 1) Walter, K., and Schutt, C., in *Methods of Enzymatic Analysis*, Bergmeyer, H.U. ed., 2nd ed., Volume II, Academic Press, Inc. (New York, NY:1974), 860- 864.
- 2) van Noort M, et al., 2002, *J Biol Chem*, 277(20), 17901-5.

For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or  
1(312) 455-8498 (outside USA)

E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

Humankine<sup>®</sup> product line  
**HUMANZYME**  
Now part of Proteintech Group<sup>®</sup>