

**DESCRIPTION**

**Source** Chinese Hamster Ovary cell line, CHO-derived  
Ala20-Trp354  
Accession # NP\_033316

**N-terminal Sequence Analysis** Ala20 & Trp23

**Predicted Molecular Mass** 37 kDa

**SPECIFICATIONS**

**SDS-PAGE** 40-62 kDa, reducing conditions

**Activity** Measured by its ability to induce alkaline phosphatase production by C3H10T1/2 mouse embryonic fibroblast cells. The ED<sub>50</sub> for this effect is typically 0.5-2.5 µg/mL.

**Endotoxin Level** <0.10 EU per 1 µg of the protein by the LAL method.

**Purity** >95%, by SDS-PAGE with silver staining.

**Formulation** Lyophilized from a 0.2 µm filtered solution in PBS, NaCl, EDTA and CHAPS with BSA as a carrier protein. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

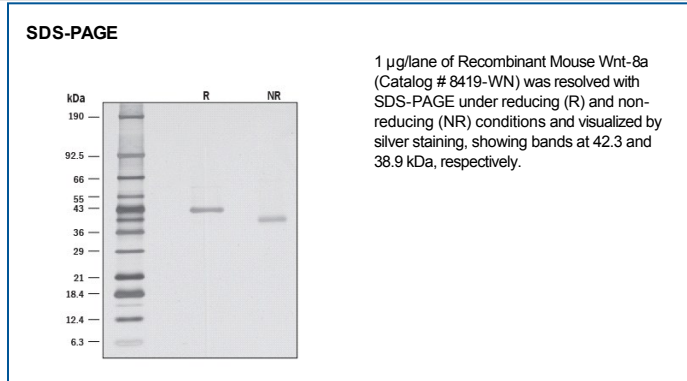
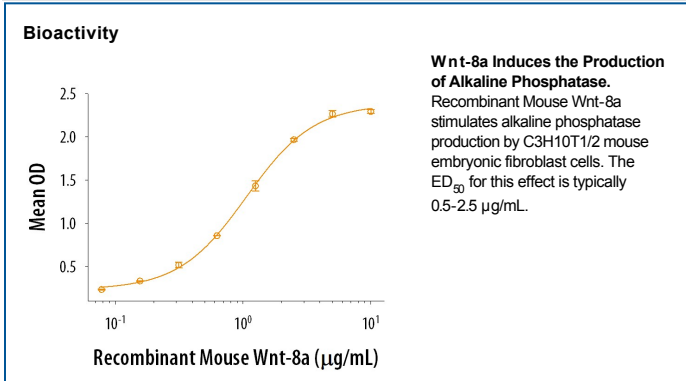
**Reconstitution** Reconstitute at 100 µg/mL in PBS containing at least 0.1% human or bovine serum albumin.

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

**DATA**



**BACKGROUND**

Wnt-8a is a member of the large and highly conserved Wnt family of signaling molecules that have roles in pattern formation, cell fate decision, axon guidance, and tumor formation (1). Mouse Wnt-8a consists of a 19 amino acid (aa) signal peptide that is cleaved to release the mature 335 aa secreted protein (2). Mature mouse Wnt-8a shares 82% and 91% sequence identity with human and rat mature Wnt-8a, respectively. Similar to other canonical Wnts, Wnt-8a binds to the Frizzled family of receptors to initiate beta-catenin signaling. Wnt-8a is expressed during early embryogenesis and is involved in mesoderm patterning and posteriorization of the neuroectoderm (3-6). Wnt-8a signaling promotes optic lens development as well as otic placode formation during inner ear development (7, 8). Expression of Wnt-8a is observed in heart progenitor cells where it positively regulates cardiac myogenesis (9, 10).

**References:**

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7. Vendrell, V. et al. (2013) Mech. Dev. **130**:160.
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