

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 ED₅₀ for this effect is 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. See Certificate of Analysis for details.

PREPARATION AND STORAGE

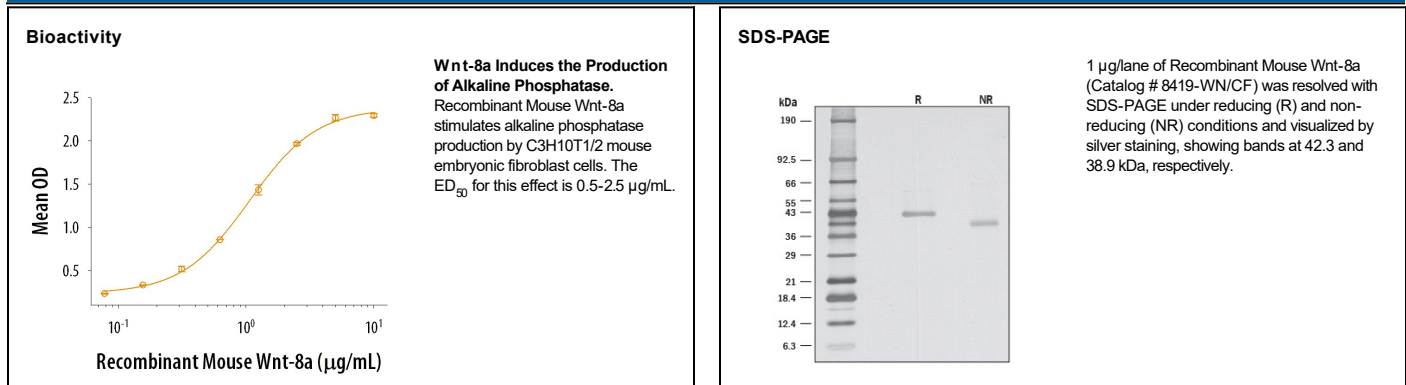
Reconstitution Reconstitute at 100 µg/mL in PBS.

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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