

Recombinant Human Noggin

Catalog Number: rhNGN

Source: Human cells-derived

Purity: 95% evaluated by SDS-PAGE

Predicted M.W.: 65 kDa (homodimer)

Description Noggin belongs to a group of diffusible proteins that binds to ligands of the TGF-β

family, and regulate their activity by inhibiting their access to signaling receptors. Noggin is expressed in defined areas of the adult central nervous system and peripheral tissues such as the lung, skeletal muscle and skin. Noggin has been shown to modulate activities of other BMPs, which is required for growth and

patterning of the neural tube and somite, and essential for cartilage morphogenesis and joint formation. Noggin also inhibits chondrocyte

differentiation through its interaction with GDF5.

Reconstitution Briefly centrifuge the vial before opening and then reconstitute at 250 μg/mL in

PBS containing at least 0.1% human or bovine serum albumin...

Activity: The activity was measured by the inhibition of BMP-4 induced alkaline

phosphatase production in the ATDC-5 cell line (Mouse chondrogenic cell line).

Handling and Storage Use a manual defrost freezer and avoid repeated freeze-thaw cycles. In general:

12 months from date of receipt, -20 to -80 °C as supplied. 1 month, 2 to 8 °C under

sterile conditions after reconstitution. 3 months, -20 to -80 $^{\circ}\mathrm{C}$ under sterile

conditions after reconstitution.

Reference Schwaerzer GK, et al. (2012) J. Bone Miner. Res. 27,429-442.

Groppe J, et al. (2002) Nature 420,636-642.

Brunet LJ, et al. (1998) Science 280,1455.