

# Human CellExp™ Osteoactivin / GPNMB, human recombinant

<b>CATALOG #:</b>	7513-10	10 µg
<b>ALTERNATE NAMES:</b>	GPNMB, HGFIN, NMB, Osteoactivin	
<b>SOURCE:</b>	HEK 293 cells (Ala 22 – Pro 486)	
<b>PURITY:</b>	≥ 95% by SDS-PAGE gel	
<b>MOL. WEIGHT:</b>	This protein is fused with 6xHis tag at the C-terminus, has a calculated MW of 52.9 kDa. The predicted N-terminus is Ala 22. DTT-reduced Protein migrates as 85-100 kDa due to glycosylation.	
<b>ENDOTOXIN LEVEL:</b>	< 1.0 EU per µg of the rhKLK-8 by the LAL method.	
<b>FORM:</b>	Lyophilized	

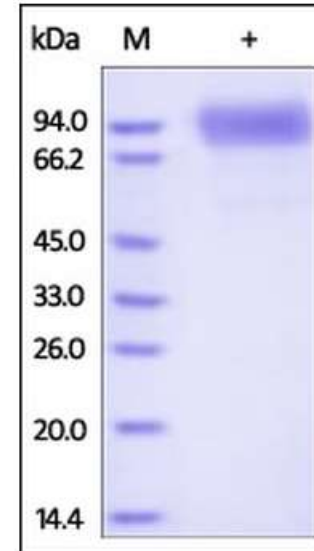
**FORMULATION:** Lyophilized from 0.22 µm filtered solution in PBS, pH 7.5. Normally Mannitol or Trehalose are added as protectants before lyophilization.

**STORAGE CONDITIONS:** Store at -20°C. After reconstitution, aliquot and store at -20°C or -70°C for up to 3 months. Avoid repeated freezing and thawing cycles. No activity loss was observed after storage in lyophilized state for 1 year (4°C) and after reconstitution under sterile conditions for 3 months (-70°C).

**RECONSTITUTION:** Centrifuge the vial prior to opening. Reconstitute in PBS, pH 7.4. Do not vortex.

**DESCRIPTION:** Transmembrane glycoprotein NMB (GPNMB) is also known as Transmembrane glycoprotein HGFIN, DC-HIL and Osteoactivin (OA), which belongs to the PMEL/NMB family. GPNMB contains one PKD domain. GPNMB is a transmembrane glycoprotein that is up-regulated in various cancer cells, including in glioblastoma multiforme and is expressed in many melanoma cells, as well as in tissue macrophages. GPNMB protein acts as a downstream mediator of BMP-2 effects on osteoblast differentiation and function. GPNMB participates in bone mineralization, and functions as a negative regulator of inflammation in macrophages.

**BIOLOGICAL ACTIVITY:** Measured by the ability of the immobilized protein to induce pro-MMP-9 secretion by NHLF human normal lung fibroblasts. The ED<sub>50</sub> for this effect is typically 4 - 16 µg/ml.



**Human recombinant Osteoactivin / GPNMB.** The purity of Osteoactivin / GPNMB was determined by DTT-reduced (+) SDS-PAGE and staining overnight with Coomassie Blue.

#### RELATED PRODUCTS:

- Human Cellexp Human Recombinant BMP-2 (Cat # 6444-10, -50)
- Human Cellexp Human Recombinant BMP-4 (Cat # 6445-10, -50)
- BMP-10, human recombinant (Cat # 4581-20, -100, -1000)
- BMP-11, human recombinant (Cat # 4576-10, -50, -1000)
- BMP-12, human recombinant (Cat # 4572-20, -100, -1000)
- BMP-13, human recombinant (Cat # 4639-10, -50, -1000)
- BMP-14, human recombinant (Cat # 4580-10, -50, -1000)
- BMP-2, human recombinant (Cat # 4577-10, -50, -1000)
- BMP-3, human recombinant (Cat # 4573-10, -50, -1000)
- BMP-4, human recombinant (Cat # 4578-10, -50, -1000)
- BMP-5, human recombinant (Cat # 4574-10, -50, -1000)
- BMP-6, human recombinant (Cat # 4911-10, -50, -1000)
- BMP-7, human recombinant (Cat # 4579-10, -50, -1000)

**FOR RESEARCH USE ONLY! Not to be used in humans.**