

**RPES8311**

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## Product Information

<b>Product SKU:</b>	RPES8311	<b>Expression Host:</b>	Mammalian	<b>Size:</b>	20µg
<b>Tag:</b>	C-His	<b>Reactivity:</b>	Human	<b>Accession:</b>	Q14956-2

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## Additional Information

<b>Calculated MW:</b>	50.9 kDa	<b>Observed MW:</b>	80-100 kDa
<b>Sequence:</b>	Lys23-Asn486		

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## Protein Information

**Background:** GPNMB belongs to the PMEL / NMB family, also known as Osteoactivin and Hematopoietic growth factor-inducible neurokinin 1 ( HGFIN ), is a transmembrane glycoprotein that is expressed in numerous cells, including osteoclasts, macrophages, dendritic cells, and tumor cells. It is suggested to influence osteoblast maturation, cell adhesion, and migration. 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. Osteoactivin is expressed at high levels in normal and inflammatory liver macrophages suggesting a significant role in acute liver injury. The early-phase upregulation of Osteoactivin expression in the tubular epithelium in response to renal injury might play a role in triggering renal interstitial fibrosis via activation of matrix metalloproteinase expression and collagen remodeling in rats. Osteoactivin is a protein that is expressed in aggressive human breast cancers and is capable of promoting breast cancer metastasis to bone.

**Synonyms:** Glycoprotein (transmembrane) nmb, Glycoprotein nmb, Glycoprotein nmb like protein, Gpnmb, GPNMB\_HUMAN, HGFIN, NMB, Osteoactivin, Transmembrane glycoprotein, Transmembrane glycoprotein HGFIN, Transmembrane glycoprotein NMB

**Endotoxin:** < 1.0 EU/mg of the protein as determined by the LAL method

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**Formulation:** Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.

**Purity:** > 90% as determined by reducing SDS-PAGE.

**Bio-Activity:** Not validated for activity

**Storage:** Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.