Bone Morphogenetic Protein 7 (BMP7)

Catalogue no.: **Q31 and Q32**
Clone name: **A1 and G7**

Product: **VHH directed against Bone Morphogenetic Protein 7**

Target: Bone Morphogenetic Proteins (BMPs) are TGF-β-like secreted signaling molecules that play important roles in embryogenesis, tissue morphogenesis, cell differentiation and migration, and tumorigenesis.[1] BMP7, also known as osteogenic protein 1 (OP-1) (UniProtKB P18075) is produces as a 49 kDa precursor that, upon cleavage, results in a 139 amino acid mature BMP7 protein.[2] Mature BMP7 shares 75% sequence homology with those of BMP5 and BMP6.[2] BMP7 acts as homodimers or heterodimers with BMP2 or BMP4.[3] BMP-7 binds and activates the type 1 receptors ActR-IA, BMPR-IA, and BMPR-IB and the type 2 receptors ActR-IIA, ActR-IIB, and BMPR-II.[4] For tissue regeneration, BMP-7 can promote bone formation and nephron development.

Source: Recombinant monoclonal VHH (*Llama glama*), purified from *S.cerevisiae* using affinity chromatography.
Immunization with recombinant BMP7. Phage-display selection on immobilized BMP7 with total elution.

Specificity: Human BMP7.

Formulation: 0.2 µm filtered solution in PBS.

Storage: Shipped on blue ice. Store at 4°C or -20°C (aliquots).
Addition of 0.02% sodiumazide is optional.

Applications: ELISA

Products:

Cat. No.	Target	Tag	Label
Q31/Q32	BMP7	Tagless	No label
Q31c/Q32c	BMP7	C-direct	No label
Q31c/Q32c-lab	BMP7	C-direct	Biotin / NOTA / HiLyte488 / IRDye800CW

References:

1 Hogan, BL., (1996) Genes Dev 10:1580-1594
2 Ozkaynak et al., (1990) EMBO J 9:2085-2093
3 Israel et al., (1996) Growth Factors 13:291-300
4 Yeh LC., (2010) Int J Biomed Sci 6:176-181