



# Monoclonal Anti-human BMP-15 Antibody

## ORDERING INFORMATION

**Catalog Number:** MAB2925

**Clone:** 317809

**Lot Number:** WTB01

**Size:** 100 µg

**Formulation:** 0.2 µm filtered solution in PBS  
with 5% trehalose

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** human BMP-15

**Immunogen:** *E. coli*-derived rhBMP-15

**Ig class:** rat IgG<sub>2A</sub>

**Recommended Applications:**  
Immunohistochemistry  
Western blot

**Other Application:**  
Direct ELISA

## Background

Human BMP-15, also known as GDF-9B, is a member of the TGF-β superfamily. Mature BMP-15 has three intrachain disulfide bands that form a cysteine-knot fold. It is secreted as a 34 kDa non-disulfide-linked homodimer and as a 37 kDa nondisulfide heterodimer with GDF-9. BMP-15 is a product of oocytes and promotes granulosa cell proliferation and stem cell factor secretion. Mature human BMP-15 shares 54% aa sequence identity with mature human GDF-9. It also shares 70% and 78% aa sequence identity with mouse and sheep BMP-15, respectively.

## Preparation

This antibody was produced from a hybridoma resulting from the fusion of a rat myeloma with B cells obtained from a rat immunized with purified, *E. coli*-derived, recombinant human Bone morphogenetic protein 15 (rhBMP-15; aa 268 - 392; Accession # NP\_005439). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

## Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

## Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

## Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a **manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

## Specificity

This antibody detects human BMP-15 in direct ELISAs and Western blots. In these applications this antibody shows no cross-reactivity with rhBMP-1.1, -2, -3, -3b, -4, -5, -6, -7, -8, or -10.

## Applications

**Immunohistochemistry** - This antibody was used at a concentration of 10 µg/mL to detect BMP-15 in adult mouse ovaries (Gueripel, X. *et al.* (2006) *Biol. Rep.* 75:836). Cells were fixed with PBS containing 4% paraformaldehyde and blocked with PBS containing 10% normal donkey serum, 0.1% Triton® X-100, and 1% BSA. After blocking, cells were incubated with diluted primary antibody followed by NL557-coupled anti-mouse IgG in the dark. Between each step, cells were washed with PBS containing BSA.

**Western blot** - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect human BMP-15. Using a colorimetric detection system, the detection limit for rhBMP-15 is approximately 25 ng/lane under non-reducing and reducing conditions. Chemiluminescent detection will increase sensitivity by 5 to 50 fold.

**Direct ELISA** - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human BMP-15. The detection limit for rhBMP-15 is approximately 2 ng/well.

**Optimal dilutions should be determined by each laboratory for each application.**

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