

## Datasheet

### Anti-GDF9B Clone 28A

Product Name	Anti Human GDF9B 28A
Catalogue Number	28A
Clone, Isotype	28A, IgG1
Format	IgG
Tested Applications	WB, ICC, ELISA, IB

#### **Description:**

BMP15, also known as GDF9B, plays a crucial role in the regulation of fertility. Clone 28A has been used to detect BMP15 expression and biosynthesis in various carcinoma progression studies.

#### **Product Details:**

**Form in stock:** IgG, purified – 1.0 mg/mL. Also available as unpurified supernatant.

**Host:** Mouse

**Specificity:** Recognizes sequence SAEVTASSSKHSGPEN<sub>1</sub>QC on the C-terminus of human BMP15.

**Fusion partner:** Spleen cells from immunised T/O mice were fused with cells of the SP2/0 myeloma cell line.

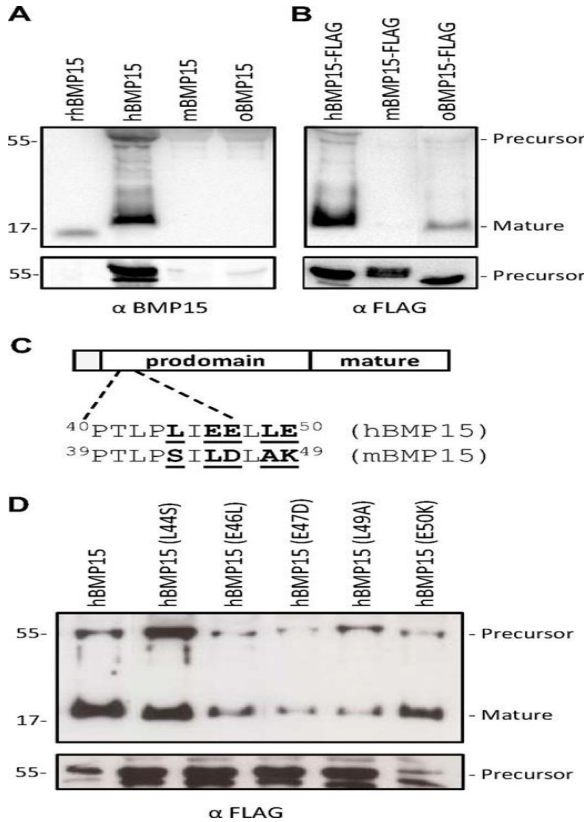
**Storage:** Store at +4°C or -20°C. Avoid repeated freezing and thawing.

**Shelf life:** 18 months from date of dispatch.

**Regulatory/ Restrictions:** For research and commercial purposes.

<b>Applications</b>	<b>Suggested Dilution</b>
<b>Western Blot</b>	1:5000 <sup>1</sup>
<b>Immunocytochemistry</b>	Assay dependent
<b>ELISA</b>	Assay dependent
<b>Immunoblotting</b>	1:10000 <sup>3</sup>

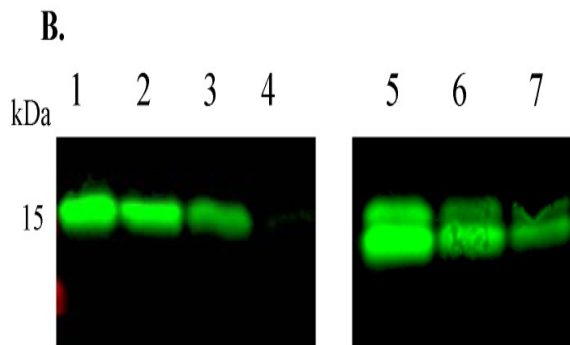
**Applications:**



Clone 28A used to detect prodomain mutations in human MBP15 biosynthesis by **Western Blot**

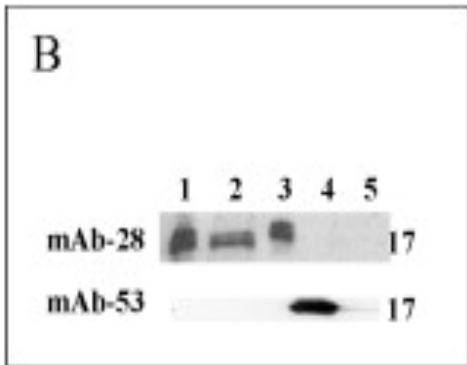
**Image caption:** Samples were detected under reduced conditions using a human-specific BMP15 mAb (A) or an anti-FLAG M2 antibody (B). C, Five nonconserved residues (boldface type, underlined) within the α1-helix of the hBMP15 prodomain (Leu<sup>44</sup>, Glu<sup>46</sup>, Glu<sup>47</sup>, Leu<sup>49</sup>, and Glu<sup>50</sup>) were substituted with the corresponding mBMP15 residues (Ser<sup>43</sup>, Leu<sup>45</sup>, Asp<sup>46</sup>, Ala<sup>48</sup>, and Lys<sup>49</sup>) using site-directed mutagenesis. (Al-Musawi, S et al.)

**Dilution used:** 1:5000



Clone 28A used to purify and quantify human BMP15 by **Western Blot**

**Image caption:** B. The processed mature region of pro-mature BMP15 was quantified by Western blotting [mab28 monoclonal antibody <sup>[42]</sup>] using the mature region of hBMP15 (R&D Systems) as a standard. Lanes 1–4: mature region of BMP15 (R&D Systems); 200, 100, 50 and 10 ng, respectively. Lanes 5–7: decreasing doses of the purified BMP15 pro-mature complex. (Sudiman, J et al.)



Clone 28A used to detect BMP15 in HEK-293T cell lines by

**Immunoblotting**

**Image caption:** (B) Recombinant proteins produced from stable HEK-293T cell lines and subjected to SDS-PAGE immunoblotting (ECL). 1: BMP15wt, 2: BMP15 form 1, 3: BMP15 form 2 (with C-terminal Flag tag), 4: GDF9 wt (recognised by the GDF9 specific mAb-53 (Gilchrist et al., 2004b)), 5: TGF- $\beta$  200 ng. All samples were reduced with 10 mM DTT before running into the gels. The specific BMP15 mAb-28 reveals the 16–17 kDa mature human BMP15 protein. The mAb-28 does not cross-react with GDF9, showing the specificity of the antibody to BMP15. (Pulkki M,M et al.)

**Dilution used:** 1:10000

**References:**

1. Al-Musawi, S.L., Walton, K.L., Heath, D., Simpson, C.M., Harrison, C.A. (2013) Species Differences in the Expression and Activity of Bone Morphogenetic Protein 15. *Endocrinology*; 154 (2): 888-899.
2. Sudiman, J., Sutton-McDowall, M.L., Ritter, L.J., White, M.A., Mottershead, D.G., Thompson, J.G., Gilchrist, R. B. (2014) Bone Morphogenetic Protein 15 in the Pro-Mature Complex Form Enhances Bovine Oocyte Developmental Competence. *PLoS ONE*, 9(7), e103563.
3. Pulkki, M.M., Myllymaa, S., Pasternack, A., Lun, S., Al-Qahtani, Korchynskyi, O., Groome, N.P., Juengel, J.L., Laitinen, M., Ritvos, O., Mottershead, D.G. (2011) The bioactivity of human BMP15 is sensitive to C-terminal modification : characterization of the purified untagged processed mature region. *Mol. Cell. Endocrinol.* 332: 106-15.