

## Datasheet

### Anti-Activin $\beta$ -C Clone 1

Product Name	Anti Human Activin $\beta$ -C Clone 1
Catalogue number	BetaC1
Clone, Isotype	Clone 1, IgG1
Format	IgG
Tested Applications	WB, IHC

#### **Description:**

Activin is part of the TGF-beta superfamily, known to regulate growth and differentiation of cells. The  $\beta$ -C subunit of Activin is expressed in a range of tissues having growth promoting and inhibitory properties.  $\beta$ -C Clone 1 recognizes the  $\beta$ -C subunit of Activin and is a useful stain to detect expression of the protein in hepatocyte cells.

#### **Product Details:**

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

**Host:** Mouse

**Specificity:** Synthetic peptide sequence VPTARRPLSLLYYDRDSNIKVTDIPMVVEAC which recognizes amino acids 82-113 of human Activin  $\beta$ -C subunit.

**Human Histology positive control:** Liver

**Fusion partner:** Spleen cells immunised from Balb/c were fused with cells of the mouse SP2/0 myeloma cell line.

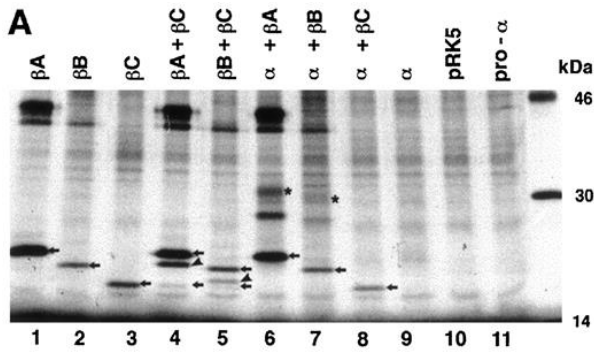
**Storage:** Store at +4°C or -20°C. Avoid repeated freezing and thawing.

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

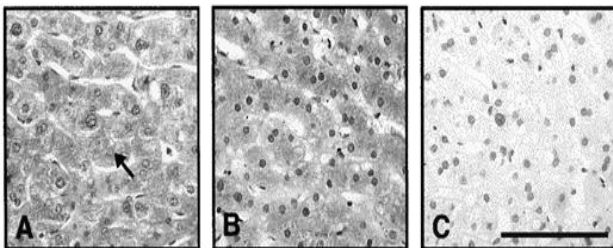
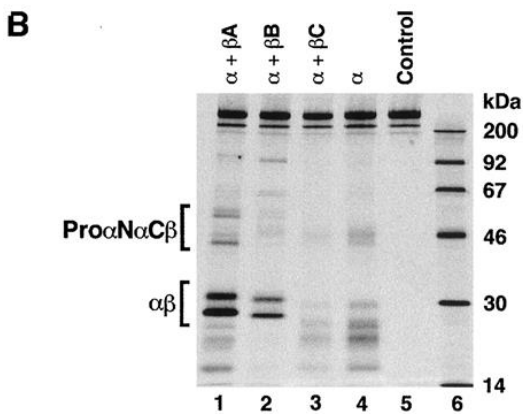
**Regulatory/ Restrictions:** For research and commercial purposes.

Applications	Suggested Dilution
Western Blot	1:3000-1:5000 <sup>1-3</sup>
Immunohistochemistry	5.0-5.8 $\mu$ g/mL <sup>1,2</sup>

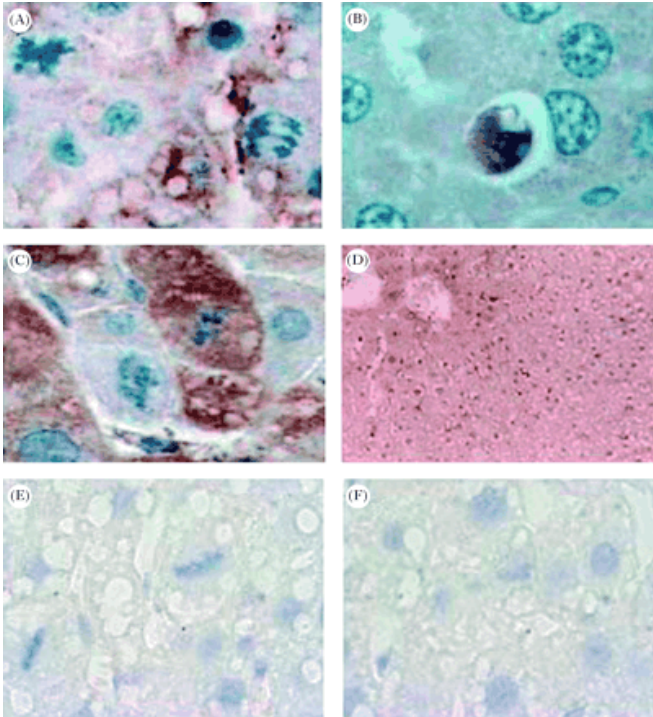
**Applications:**



**Western Blot** used to determine whether Beta C Clone 1 recognizes mono- and dimeric active Beta C  
(Mellor S, L et al.)  
**Dilution used:** 1:5000



**Beta C Clone 1** used to detect hepatocytes in human liver by **IHC**  
**Image caption:** ...  $\beta_c$ -Subunit immunoreactivity was detected in hepatocytes in human liver sections with  $\beta_c$  clone 1 antibody supernatant ... (Mellor S, L et al.)  
**Dilution used:** 5.8  $\mu\text{g}/\text{mL}$



Beta C Clone 1 used to detect hepatocytes in human liver by IHC

**Image caption:** ...C) Cytoplasmic  $\beta$ C-activin subunit immunoreactivity in association with mitosis. (D)  $\beta$ C-activin subunit immunoreactivity within hepatocyte nuclei... (Gold, E. J)

**Dilution used:** 5.0  $\mu$ g/mL

## References:

1. Mellor, S.L., Cranfield, M., Ries, R., Pedersen, J., Cancilla, B., de Kretser, D., Groome, N.P., Mason, A.J., Risbridger, G.P. (2000) Localization of Activin  $\beta$ <sub>A</sub>-,  $\beta$ <sub>B</sub>-, and  $\beta$ <sub>C</sub>-Subunits in Human Prostate and Evidence for Formation of New Activin Heterodimers of  $\beta$ <sub>C</sub>-Subunit. *Journal of Clinical Endocrinology & Metabolism*; 85 (12): 4851-4858.
2. Mellor, S.L., Ball, E.M.A., O'Connor, A.E., Ethier, J., Cranfield, M., Schmitt, J.F., Phillips, D.J., Groome, N.P., Risbridger, G.P. (2003) Activin  $\beta$ <sub>C</sub>-Subunit Heterodimers Provide a New Mechanism of Regulating Activin Levels in the Prostate. *Endocrinology*; 144 (10): 4410-4419. **WB, Dilution used 1:5000**
3. Gold, E. J. (2005) Beta A- and Beta C-activin, Follistatin, Activin Receptor MRNA and Beta C-activin Peptide Expression during Rat Liver Regeneration. *Journal of Molecular Endocrinology* 34.2; 505-15. **Aslo uses WB, Dilution 1:3000**