

## Anti-alpha-V beta 3 integrin [EM22703] Standard Size Ab00890-13.12

This chimeric human antibody was made using the variable domain sequences of the original Rabbit IgG format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG4-S228P, Kappa

Clone Number: EM22703

**Alternative Name(s) of Target:**  $\alpha\nu\beta3$ ; Vitronectin receptor subunit alpha; CD51; ITGB3; Platelet membrane glycoprotein IIIa; CD61; P06756; P05106; avb3

**UniProt Accession Number of Target Protein:** 

Published Application(s): WB, ELISA, FC, IHC

Published Species Reactivity: Human

**Immunogen:** This antibody was raised by immunising rabbits, isolating B cells from the immunised rabbits and fusing these with a rabbit plasmacytoma cell line (established by Spieker-Polet et al., 1995) to produce stable hybridomas

**Specificity:** This antibody is specific for the extracellular domain of human recombinant transmembranetruncated (DTM)  $\alpha\nu\beta3$  integrin, a dimeric cell surface protein that mediates cell attachment.  $\alpha\nu\beta3$  integrin is also involved in tumour growth and angiogenesis.

**Application Notes:** This antibody has been used to specifically bind  $\alpha\nu\beta3$  in Western blots and in flow cytometry, and to specifically stain  $\alpha\nu\beta3$  integrins in FFPE (formalin fixed paraffin embedded)/TMA material, where murine antibodies function poorly (Goodman et al, 2012; Heß et al., 2014; Roth et al, 2013).  $\alpha\nu\beta3$  was found to be strongly expressed in some invasive NSCLC samples, though was not expressed by PC3 prostate cells and human prostate tumours. In FC, the EM22703 signal is increased 3–10 fold in the presence of nanomolar concentrations of the antagonistic  $\alpha\nu\beta3$  inhibitor cilengitide, indicating that EM22703 detects a ligand-induced binding site on  $\alpha\nu\beta3$  (Goodman et al, 2012).

**Antibody First Published in:** Goodman et al. Matched rabbit monoclonal antibodies against  $\alpha$ v-series integrins reveal a novel  $\alpha\nu\beta$ 3-LIBS epitope, and permit routine staining of archival paraffin samples of human tumours Biol Open. 2012 Apr 15; 1(4): 329–340. PMID:23213423

Note on publication: Describes the generation and characterisation of this antibody.

## **Product Form**

**Size:** 100 μg Purified antibody. **Purification:** Protein A affinity purified

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at - 20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.