

Anti-MMP9, AlpHcAbs® Human antibody

Summary

Cat.No	300-708-001
Immunogen	Recombinant human MMP9
Host	Alpaca pacous
Isotype	Human IgG1
Conjugate	Unconjugated
Specificity	Human MMP9
Purity	Recombinant Expression and Affinity purified
Concentration	1mg/ml
Formation	Liquid, 10mM PBS (pH 7.5), 0.05% sucrose, 0.1% trehalose, 0.01% proclin300, 50% Glycerol
Storage	Store at -20 °C, (Avoid freeze / thaw cycles)

Description

Anti-MMP9, AlpHcAbs® Human antibody is designed for detecting human MMP9 specifically. Based on ELISA and/or FCM, Anti-MMP9, AlpHcAbs® Human antibody reacts with human MMP9 specifically.

Background

MMP9 (matrix metalloproteinase 9, GELB, CLG4B) is a matrix metalloproteinase, a family of zinc and calcium-dependent endopeptidases that degrade extracellular matrix proteins. MMP9 is secreted as a 92kDa zymogen and cleavage of pro-MMP9 results in the active enzyme with a molecular weight of 82kDa. MMP9 has a gelatin-binding domain consisting of three fibronectin type II units, a catalytic domain containing the zinc-binding site, a proline-rich type V collagen-homologous domain and a hemopexin-like domain. MMP9 is produced by monocytes, macrophages, neutrophils, keratinocytes, fibroblasts, osteoclasts and endothelial cells, and is involved in inflammatory responses, tissue remodeling, wound healing, tumor growth and metastasis. MMP9 is supplied by bone marrow-derived cells and contributes to skin carcinogenesis. Further, MMP9 degrades type IV and V collagens. Studies in rhesus monkeys suggest that the enzyme is involved in IL-8-induced mobilization of hematopoietic progenitor cells from bone marrow, and murine studies suggest a role in tumor-associated tissue remodeling. Studies have shown that elevated MMP9 is associated with progression of idiopathic atrial fibrillation and aortic aneurysm.

Benefits

- High lot-to-lot consistency
- Increased sensitivity and higher affinity
- Animal-free production

Application notes

ELISA: 1:4,000-1:10000
Flow Cytometry: 1:200-1:1000

Dilution factors are presented in the form of a range because the optimal dilution is a function of many factors, such as antigen density, permeability, etc. The actual dilution used must be determined empirically.

This product is for research use only and is not approved for use in humans or in clinical