



Catalogue No. PA1021-S

Lot No. 09K03

Ig type: rabbit IgG

Size: 100µg/vial

Specificity Human, mouse, rat. No cross reactivity with other proteins..

Recommended application

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(Immunoprecipitation(IP)

## Immunogen

A peptide mapping at the C-terminal end of human CD44, different to the related mouse sequence by one amino acid.

Purification Immunogen affinity purified.

Formulation 50% slurry in PBS pH 7.2 with 0.01mg NaN<sub>3</sub> $a_3$  preservative.

Storage Store at 4°C for frequent use.

## **Description:**

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

## BACKGROUND

The CD44 gene, which is a transmembrane protein, is expressed as a family of molecular isoforms generated from alternative RNA splicing and posttranslational modifications. The gene, which contains 19 exons spanning some 50 kb of genomic DNA, is a widely expressed integral membrane protein that acts as a receptor for hyaluronan (HA) and is important to cell-extracellular matrix interaction. CD44 binding with HA can play an important role in cellular aggregation and tumor cell growth. CD44 is necessary for limb development and functions in a novel growth factor presentation mechanism. A specific CD44 splice variant is crucial for the proliferation of these mesenchymal cells. CD44 glycoproteins are involved in leukocyte extravasation but also in the regulation of growth factor activation, stability, and signaling. Moreover, it plays a pivotal role in arteriogenesis.

## REFERENCE

 Screaton GR, Bell MV, Jackson DG, Cornelis FB, Gerth U, Bell JI. Genomic structure of DNA encoding the lymphocyte homing receptor CD44 reveals at least 12 alternatively spliced exons. Proc Natl Acad Sci U S A. 1992 Dec 15; 89(24):12160-4.
Telen MJ, Udani M, Washington MK, Levesque MC, Lloyd E, Rao N. A blood group-related polymorphism of CD44 abolishes a hyaluronan-binding consensus sequence without preventing hyaluronan binding. J Biol Chem. 1996 Mar 22; 271(12):7147-53.

Weber GF, Ashkar S, Glimcher MJ, Cantor H. Receptor-ligand interaction between CD44 and osteopontin (Eta-1). Science. 1996 Jan 26; 271(5248):509-12. 4. Sherman L, Wainwright D, Ponta H, Herrlich P. A splice variant of CD44 expressed in the apical ectodermal ridge presents fibroblast growth factors to limb mesenchyme and is required for limb outgrowth. Genes Dev. 1998 Apr 1; 12(7):1058-71.
van Royen N, Voskuil M, Hoefer I, Jost M, de Graaf S, Hedwig F, Andert JP, Wormhoudt TA, Hua J, Hartmann S, Bode C, Buschmann I, Schaper W, van der Neut R, Piek JJ, Pals ST.CD44 regulates arteriogenesis in mice and is differentially expressed in patients with poor and good collateralization. Circulation. 2004 Apr 6; 109(13):1647-52.