COSMO BIO CO., LTD.
Inspiration for Life Science

MONOCLONAL ANTIBODY

For research use only, Not for diagnostic use

Catalog PRPG-BC-M02

Anti CS[Chondroitin Sulfate] (2B6)

BACKGROUND

Monoclonal antibody 2B6 recognises 4-sulfated unsaturated disaccharide neoepitopes (i.e. C-4-S "stubs") generated at the non-reducing terminal of Chondroitin Sulfate or Dermatan Sulfate glycosaminoglycan chains that have been pre-digested with Chondroitinase ABC [see Figure 2; Caterson B (2012) Int. J. Exp. Pathol. 93: 1 - 10] but only Chondroitin Sulfate glycosaminoglycan chains pre-digested with Chondroitinase ACII or only Dermatan Sulfate glycosaminoglycan chains pre-digested with Chondroitinase B.

Product type	Primary antibody
Immunogen	4-sulfated chondroitin sulfate disaccharide Chondroitinase ABC digested Bovine Aggrecan
Rased in	Mouse (BALB/c)
Myeloma	X63-Ag8.653
Clone number	2B6
Isotype	IgG1
Source	Serum containing culture supernatent
Purification	-
Buffer	0.01M Tris-saline containing 0.02% NaN3 as a preservative
Concentration	Not known
Volume	1 mL
Label	Unlabeled
Specificity	4-sulfated unsaturated disaccharide neoepitopes (i.e. C-4-S "stubs") generated at the non-reducing terminal of Chondroitin Sulfate or Dermatan Sulfate glycosaminoglycan chains that have been pre-digested with Chondroitinase ABC [see Figure 2; Caterson (2012) Int. J. Exp. Pathol. 93: 1 - 10] but only Chondroitin Sulfate glycosaminoglycan chains pre-digested with Chondroitinase ACII or only Dermatan Sulfate glycosaminoglycan chains pre-digested with Chondroitinase B.
Cross reactivity	All animal species
Storage	Stable for 3-4 days @ 4°C. Store below -20°C (below -70°C for prolonged storage). Aliquot to avoid repeated cycles of freeze/thawing.
Other	See Hayes AJ et al (2008) Methods 45: 10 - 21

Application notes
Recommended dilutions

- **Western blotting**: 1/100 (e.g. 50µl to 5 ml with blocking buffer)
- **Immunohistochemistry**: 1/20 (e.g. 20µl to 400µl with blocking buffer).

Other applications have not been tested.
Optimal dilutions/concentrations should be determined by the end user.

References

1) Caterson B. (2012). Chondroitin sulphate glycosaminoglycans: fun for some and confusion for others. Int. J. of Exp. Path. 93: 1 – 10 PubMed: 22264297
2) Hayes AJ, Hughes CE & Caterson B (2008). Antibodies and immunohistochemistry in extracellular matrix research. Methods 45: 10 - 21 PubMed: 18442701
3) Davies L, Blain E, Caterson B and Duance VC (2008). Chondroitin sulphate impedes the migration of a sub-population of articular cartilage chondrocytes. Osteoarthritis & Cartilage 16: 855 - 864 PubMed: 18222711
4) Hayes AJ, Hall A, Brown L, Tubo R & Caterson B (2007). Macromolecular organization and in vitro growth characteristics of scaffold-free neocartilage grafts. J. Histochem. Cytochem. 55: 853 – 866. PubMed: 17478447
5) Katz H, Austen KF, Caterson B, & Stevens RL (1986). Secretory granules of Heparin-containing Rat serosal mast cells also possess highly sulfated chondroitin sulfate proteoglycans. J. Biol. Chem. 261: 13393 - 13396 PubMed: 3531203

RELATED PRODUCTS:

Product Name	Clone	Maker	Cat#
Anti CS [Chondroitin Sulfate] Monoclonal Antibody	2B6	CAC	PRPG-BC-M02
Anti CS [Chondroitin Sulfate] Monoclonal Antibody	1B5	CAC	PRPG-BC-M03
Anti CS [Chondroitin Sulfate] Monoclonal Antibody	3B3	CAC	PRPG-BC-M04
Anti Chondroitin Sulfate A Monoclonal Antibody	2H6	CAC	NU-07-001
Anti Aggrecan Monoclonal Antibody	6F4	CAC	PRPG-AG-M01
Anti Aggrecan Monoclonal Antibody	5D3	CAC	PRPG-AG-M02
Anti Aggrecan Monoclonal Antibody	5G2	CAC	PRPG-AG-M03
Anti Aggrecan Monoclonal Antibody	7B7	CAC	PRPG-AG-M04
Anti Versican/CSPG2 Monoclonal Antibody	5C12	CAC	PRPG-VS-M01
Anti Versican/CSPG2 Monoclonal Antibody	4C5	CAC	PRPG-VS-M02
Anti Neurocan Monoclonal Antibody	1G2	CAC	NU-07-002
Anti Neuroglycan C Monoclonal Antibody	C1	CAC	NU-07-003
Anti Neurocan peptides Polyclonal Antibody	-	CAC	NU-07-005
Anti N-syndecan Polyclonal Antibody	-	CAC	NU-07-004
Anti BPAG1(BP230) Monoclonal Antibody	279	CAC	NU-01-BP1
Anti NG2 / CSPG4 Monoclonal Antibody	2164H5	CAC	PRPG-NG-M01
Anti COMP Monoclonal Antibody	484D1	CAC	PRPG-CP-M01
Anti COMP Monoclonal Antibody	490D11	CAC	PRPG-CP-M02
Anti Keratan sulfate Monoclonal Antibody	373E1	CAC	PRPG-KS-M01
Anti KS [Keratan Sulfate] Monoclonal Antibody	5DA	CAC	PRPG-BC-M01
Anti Decorin Monoclonal Antibody	889C7	CAC	PRPG-DC-M01
Anti Fibromodulin Monoclonal Antibody	636B12	CAC	PRPG-FBM-M01
Anti Biglycan Monoclonal Antibody	905A7	CAC	PRPG-BG-M01
Anti XTP1 Monoclonal Antibody	2191H1	CAC	PRPG-XTP-M01
Anti SDP35 Monoclonal Antibody	2200D12	CAC	PRPG-SDP-M01
Anti Laminin α4 Monoclonal Antibody	652C4	CAC	PRPG-LA4-M01
Anti Laminin ALPHA3 Monoclonal Antibody	BM515	CAC	NU-01-LA3
Anti Collagen 7 Monoclonal Antibody	BML39	CAC	NU-01-CO7
Anti Collagen 12 Monoclonal Antibody	378D5	CAC	PRPG-CO12-M01

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