Qty: 100µg/400 µL

Rabbit anti-Syndecan-2

Catalog No. 36-6200

Lot No.:

Rabbit anti-Syndecan-2

FORM
This polyclonal antibody is supplied as a 400µL aliquot at a concentration of 0.25 mg/mL in phosphate buffered saline (pH 7.4) containing 0.1% sodium azide. This antibody is epitope-affinity purified from rabbit antiserum.

PAD: ZMD.308

IMMUNOGEN
Synthetic peptide derived from the internal region of human syndecan-2 (fibroglycan).

SPECIFICITY
This antibody is specific for human syndecan-2 (fibroglycan). It recognizes the unglyconated form and may recognize the glyconated form. On Western blots, it identifies a single band at ~ 22 kDa. An additional band at ~ 40 kDa may also be observed which may represent a glycanated form.

REACTIVITY
Reactivity has been confirmed with human A-549 lung carcinoma, HEP-G2 hepatocellular carcinoma, HT-29 colorectal adenocarcinoma, K-562 chronic myleogenous leukemia-bone marrow, TF-1 erythroleukemia-bone marrow and U-2 OS osteosarcoma cell lysates.

Sample	ELISA	Western Blotting
Human	ND	+++
Immunogen	+++	N/A

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

USAGE
Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western Blotting: 1-3 µg/mL
ELISA: 0.1-1 µg/mL

STORAGE
Store at 2-8°C for up to one month. Store at –20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

BACKGROUND

Syndecans are heparan sulfate proteoglycans (HSPGs) that consist of a hydrophobic membrane-spanning domain, a short cytoplasmic domain, and an extracellular domain. Syndecans contain a small core protein with distinct functional domains to which multiple glycosaminoglycan (GAG) chains are linked, predominantly of the heparan sulfate variety. Syndecans are involved in cell adhesion, tissue morphogenesis and differentiation and regulation of cell responsiveness to soluble growth-regulatory compounds[1-2]. These functions are attributed primarily to the glycan moieties. Syndecans also interact with growth factors such as fibroblast growth factor[3] and epidermal growth factor[4].

Syndecan-2, which was previously named fibroglycan, was originally cloned from embryonic fibroblasts[5]. Syndecan-2 is expressed in epithelial-mesenchymal interfaces, and prechondrogenic and preosteogenic mesenchymal condensations, which are areas of high morphogenetic activity[6]. Syndecan-2 is involved in the mitogenic activity and signaling of Granulocyte-Macrophage Colony-stimulating factor (GM-CSF) in osteoblasts[7], and has been shown to have a regulatory role in matrix assembly[8]. Increased syndecan-2 expression is important for colon carcinoma behavior, and syndecan-2 regulates tumorgeneiactivity by regulating adhesion and proliferation in colon carcinoma cells[9].

REFERENCES

1. Bernfield M, et al. *Dev Suppl*: 205-12, 1993.
2. Carey DJ. *Biochem J* 327: 1-16, 1997.
3. Coutts JC and Gallagher JT. *Immunol Cell Biol* 73: 584-9, 1995.
4. Subramanian SV, et al. *J Biol Chem* 272: 14713-20, 1997.
5. Marynen P, et al. *J Biol Chem* 264: 7017-24, 1989.
6. David G, et al. *Development* 119: 841-54, 1993.
7. Modrowski D, et al. *J Biol Chem* 275: 9178-85, 2000.
8. Klass CM, et al. *J Cell Sci* 113 (Pt 3): 493-506, 2000.
9. Park H, et al. *J Biol Chem* 277: 29730-6, 2002.

RELATED PRODUCTS

Product	*Clone/PAD**	*Cat. No.*
Rb x Syndecan-1	ZMD.289	36-2900
Rb x Syndecan-3 (Mid)	ZMD.284	36-2400
Rb x Syndecan-3 (N-term)	ZMD.285	36-2500
Rb x Syndecan-4	ZMD.293	36-3100
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

*PAD: Polyclonal Antibody Designation

Conjugate	ZyMAX™ Goat x Rabbit IgG (H+L)	ZyMAX™ Goat x Mouse IgG (H+L)
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

For Research Use Only