

Product Information

Monoclonal Anti-Biglycan, clone 905A7 produced in mouse, purified immunoglobulin

Catalog Number **SAB4200613**

Product Description

Monoclonal Anti-Biglycan (mouse IgG1 isotype) is derived from the hybridoma 905A7 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a purified bovine biglycan (GeneID 280733). The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-Biglycan recognizes human and bovine biglycan. The product may be used in several immunochemical techniques including immunoblotting (200-350 kDa), ELISA and immunohistochemistry.

Biglycan is a member of the class I family of small leucine rich proteoglycans (SLRPs). It has been mapped to the X chromosome. It encodes for a 42 kDa protein core containing leucine-rich repeats (LRRs), to which one or two glycosaminoglycan (GAG) side chains are covalently bound. Secreted biglycan interacts via its core protein or GAG chains with numerous components of the extracellular matrix (ECM), e.g., type I, II, III, and VI collagen and elastin, thereby becoming sequestered in the ECM of most organs. Data shows that biglycan signaling provides an important link between innate and adaptive immunity.² In addition, it was also found to play a crucial role in the regulation of inflammation, bone growth, and muscle development and regeneration. Reflecting its widespread expression and complex function, biglycan was found to be involved in various human diseases, such as asthma, atherosclerosis, cancer, diabetes, kidney disease etc.^{1,3}

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For extended storage, freeze at -20 °C in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunohistochemistry: a working concentration of 5-10 µg/tube is recommended using human kidney tissue sections.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

1. Nastase, M.V., et al., *J. Histochem. Cytochem.*, **60**, 963-975 (2012).
2. Moreth, K., et al., *Cell Cycle*, **11**, 2084-2091 (2012).
3. Schaefer, L., *J. Am. Soc. Nephrol.*, **22**, 1200-1207 (2011).

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