

**RABBIT ANTI-AGGREGAN
POLYCLONAL ANTIBODY**

- CATALOG NUMBER:** AB1031
- LOT NUMBER:**
- QUANTITY:** 50 µg
- CONCENTRATION:** 500 µg/mL
- SPECIFICITY:** AB1031 is specific for mouse aggrecan; other species have not been tested.
- BACKGROUND:** Aggregating chondroitin sulfate proteoglycan or aggrecan, is one of the most studied proteoglycans. Many individual monomers of aggrecan bind to hyaluronic acid to form an aggregate, the monomer is known as aggrecan. The aggregates are comprised of up to 100 monomers attached to a single chain of hyaluronic acid. The high content of negatively charged polysaccharide chains contributes to the osmotic swelling of cartilage and in combination with intact collagen fibers results in articular cartilage resistance to compressive forces and high tensile strength. Aggrecan is abundant in articular cartilage and compromises 10% of its dry weight.
- IMMUNOGEN:** GST fusion protein containing amino acids 1177-1326 of mouse aggrecan.
- HOST:** Rabbit
- APPLICATIONS:** Immunohistochemistry*(Paraffin sections): 10 µg/mL See note under Protocol regarding triton X-100 treatments. See figure 1.
Western blotting: 0.5 µg/mL Samples must be treated with chondroitinase prior to running on 6% SDS PAGE gel. Following chondroitinase treatment, 400 kD, 250 kD and smaller bands will be visible depending upon tissue. See figure 2.
Immunoprecipitation: 5µg/ 500µL of cell membrane extract in PBS with inhibitors and > 0.5% triton X-100.
- The end user must determine optimal working dilutions.
- CONTROL:** Positive- cartilage, neural tube, brain
- SPECIES REACTIVITIES:** Mouse
- FORMAT:** Liquid in PBS.
- PRESENTATION:** Antigen affinity purified antibody. Anti-GST has not been adsorbed.
- ADDITIONAL NOTES:** Aggrecan is present in articular cartilage, brain, heart, and other tissues.
- STORAGE/HANDLING:** Store antibody at -20 C for 12 months. Avoid repeat freeze thaw cycles.
- DATA:**

Figure 1

Figure 1: Staining of Embryonic
Mouse Neural Tube and Limb
Bud: C indicates cartilage. Note

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that anti-aggrecan stains cartilage in both limb bud and near neural tube as well as neural tube itself.

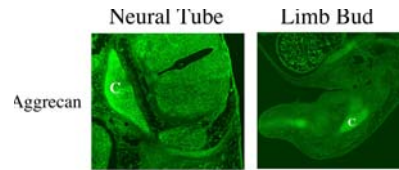
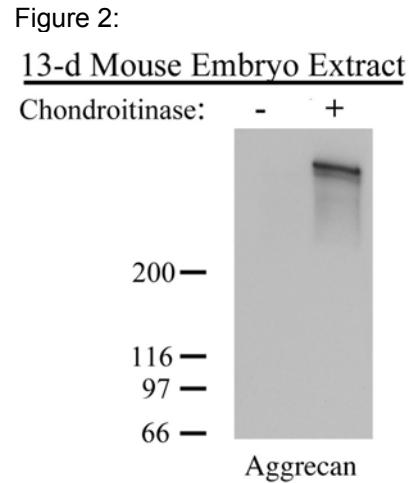


Figure 2:
Western blot: A 13-day embryonic mouse was homogenized and analyzed With and without chondroitinase treatment of the sample. Chondroitinase treatment reveals high molecular weight polypeptides recognized by anti-aggrecan.



PROTOCOL:

For immunohistochemistry, tissues must be treated with chondroitinase before staining. Permeabilization is normally not required, however in some cases excess fixation may require treatment with dilute Triton X-100 (0.1%-0.2%, 1 hour) prior to staining for enhanced reactivity.

Important Note:

During shipment, small volumes of product will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µL or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.

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