

100% Canadian

## Fish Skin Gelatin

### Fish skin gelatin

**Cat#: FG800**

**100 grams**

Average MW of 60 kDa.

### Laboratory Applications:

Applications using gelatin include coating cell culture plates to improve cell attachment for a variety of cell types, addition to PCR to help stabilize Taq DNA polymerase, and use as a blocking reagent in Western blotting, ELISA, and immunohistochemistry.

### Fish Gelatin Blocking Buffer for Western Blot Analysis:

Fish gelatin is a non-mammalian protein suitable for membrane blocking during Western Blot analysis. Its origin results in it not having some of the limitations of using skim milk or BSA as blocking agents. Fish gelatin is not phosphorylated like casein in milk, so it will not interfere with some anti-phosphorylation Western blot analysis. Fish gelatin also contains no contaminating immunoglobulins, like BSA, so it does not have the potential for cross reactivity with some antibodies.

### Suggested Applications:

**Blocking Buffer:** 1% gelatin can effectively replace 2.5-5% skim milk blocking buffers or for the buffers for antibody blotting.

- 1% gelatin
- 1x PBS or TBS (depending on the preferred buffer, TBS is suggested for anti-phospho protein blotting experiments)
- 0.1% Tween 20

Blocking in microtiter plates for ELISAs is typically the same buffer but without the Tween 20.

**Cell Line Adhesion:** Filter sterilize or autoclave a 2% gelatin solution. (Optimal conditions for attachment must be determined for each cell line and application).

- Allow gelatin solution to completely liquefy by warming to 37 °C.
- Coat culture surface with 5-10 ul gelatin solution/cm<sup>2</sup> (i.e. 0.1-0.2 mg/cm<sup>2</sup> gelatin).
- Allow surface to dry at least 2 hours before introducing cells and medium.

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

**Storage/Stability:** Dry gelatin stored in airtight containers at room temperature remains unchanged for many years.

When heated at 100 °C in the presence of air it swells, becomes soft, and disintegrates to a carbonaceous mass with evolution of pyridine bases and ammonia. Below 35-40 °C gelatin swells in and absorbs 5-10 times its weight of water to form a gel. Gelatin is soluble in glycerol and acetic acid, and more soluble in hot than in cold water. It is practically insoluble in most organic solvents such as alcohol, chloroform, carbon disulfide, carbon tetrachloride, ether, benzene, acetone, and oils