

Datasheet: PBP017

Description:	PURIFIED BOVINE FIBRONECTIN		
Name:	FIBRONECTIN		
Format:	Purified		
<b>Product Type:</b>	Purified Protein		
Quantity:	1 mg		

# **Product Details**

### **Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
ELISA	•			
Tissue Culture	•			1 - 10 ug/ml

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Bovine		
Product Form	Purified bovine fibronectin - sterile liquid		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	None present		
Endotoxin Level	<10 EU/mg		
Approx. Protein Concentrations	Protein concentration 0.5 mg/ml		
External Database Links	UniProt: P07589 Related reagents  Entrez Gene: 280794 FN1 Related reagents		

#### **Product Information**

Fibronectin is a 450 kDa glycoprotein involved in cell adhesion and migration processes including embryogenesis, metastasis, wound healing, blood coagulation and host immunity. Fibronectin may be used as a coating on tissue culture surfaces to promote attachment, spreading and proliferation of various cell types.

#### **Purity**

>/=95% by SDS PAGE

#### **Instructions For Use**

#### **Preparation of Fibronectin:**

Generally fibronectin should be stored frozen or refrigerated at 1-5 mg/ml. If frozen, thaw at  $37^{\circ}$ C. Fibronectin should never be vortexed or treated roughly as it precipitates out of solution easily (visible as a granulated precipitate or as a slimy strand or clumps). Any observed insoluble aggregates are very difficult to resuspend. If precipitation is observed, the solution should initially be warmed to  $37^{\circ}$ C with gentle shaking, followed by aseptic filtration via a 5  $\mu$ m (or smaller) cut off syringe filter.

It is also recommended that fibronectin should not be stored long term in buffer solutions containing Mg<sup>2+</sup> or Ca<sup>2+</sup> as these can contribute to fibronectin precipitation over time.

### **General Coating Procedure (for 96-well plates):**

- 1. Plates: Choice of plates can affect the amount of protein successfully coated. Bio-Rad recommends the use of commercially available high protein binding plates.
- 2. Add between 1-10  $\mu$ g/ml of fibronectin in PBS buffer for an overnight (or longer) incubation at 2-8°C (100  $\mu$ l/well). The optimum amount of protein to saturate the plate surface should be determined by the user. For ELISA applications some users have coated with carbonate buffer pH 9.0 but this is generally not necessary and can damage the cell binding activity of the fibronectin.
- 3. Regardless of assay type (cell binding, ELISA etc.), it is necessary to block the remaining protein adherence sites on the plate. Therefore, in a separate step add a blocking protein such as 2-5% BSA in PBS for at least 1 hr at room temperature or overnight at 2-8°C (200  $\mu$ l/well). Caution: The BSA solution should be 0.2  $\mu$ m filtered prior to use to remove excess non-specific binding effects in the assay caused by insoluble BSA clumps. The use of RIA-grade (radio-immunoassay grade, suitable for immunoassays) BSA is recommended.
- 4. Blocked plates can stored in the refrigerator for several weeks or can be decanted and dried and stored for months in a dessicator. Dessicated material should be rehydrated for 15 min with PBS before use.

### Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the protein. Storage in frost-free freezers is not recommended.

### Guarantee

12 months from date of despatch

Health And Safety Information	Material Safety Datasheet documentation #10209 available at: <a href="https://www.bio-rad-antibodies.com/SDS/PBP017">https://www.bio-rad-antibodies.com/SDS/PBP017</a> 10209
Regulatory	For research purposes only

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M429949:240501'

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