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# Antibody Expression Vector

**pFB-hIgJ: Human J-chain Mammalian Expression Plasmid**

**Catalog#: AEV-00**

## Product Overview

This plasmid is a constitutive mammalian expression vector designed to deliver exceptionally high levels of antibody expression. This circular vector features an enhanced, full-length CMV promoter and other expression elements that typically enable higher expression levels. It can be used in suspension-adapted cells, such as Expi293F™ and ExpiCHO™, for transient protein expression. Additionally, it can serve as a Geneticin®-selectable expression plasmid for engineering stable cell lines. The vector carries an ampicillin resistance gene.

## Specifications

Antibiotic Resistance	Ampicillin (AmpR)
Constitutive or Inducible System	Constitutive
Delivery Type	Transfection
Promoter	CMV
Product Type	Mammalian Expression Vector

## Contents & Storage

- 5.0 µg of pFB-hIgJ in Tris-EDTA buffer
- Store at -20°C. Vectors are guaranteed stable for 12 months when properly stored.

## Materials required for human IgM (pentamer) antibody generation and isotype switching

- pFB-CHlg-hM (pentamer) and pFB-CLlg-hk or pFB-CLlg-hl plasmid expressing the constant region of the human IgM and kappa or lambda light chain.

## Vector usage



- **Entire monoclonal IgM (pentamer) antibodies production:** cloning your heavy/light chain variable regions in the cloning sites to preserve the integrity of the heavy/light chain constant region;
- **Isotype switching:** pFB-CHlg-hM (pentamer) with pFB-CLlg-hk or pFB-CLlg-hl plasmids are designed to switch a monoclonal antibody from one isotype to another, therefore, maintaining the generated new antibodies with the same antigen affinity (epitopes) but with different effector functions (enhanced or reduced or even disabled ADCC and CDC).

### Vector map

