

**Tip:**  
Test it one LC-MS/MS  
column for  
11 Mycotoxins



## *Immunoaffinity Analysis*

### **Mycotoxin and Vitamin Analysis / Customized (Immuno) Affinity Columns**

*BioTeZ has been offering successfully tested IAC for Mycotoxin and Vitamin analysis for many years and offers customers the possibility to produce their own individual affinity columns of any size based on different Ligands for enrichment or separation with activated cellulose beads.*

#### **Experts in Immunoaffinity Columns (IAC):**

Reliable for many years, BioTeZ produces highly effective IAC as OEM to determine Mycotoxin contaminations or Vitamin concentrations with monoclonal antibodies for fast and easy enrichment and selection.

#### **Capabilities of BioTeZ IAC:**

- Excellent flow behavior
- Extremely robust
- Easy enrichment guarantee
- High permeability
- Little abrasion
- No increased pressure is required
- Isolation of **Mycotoxins** and **Vitamins** using highly-specific monoclonal antibodies

- Ready-to-use IAC in two sizes (1 ml and 3 ml)
- Own facilities for the production of IAC

#### **Supplementary Services:**

- ELISAs
- Mycotoxin and Detection conjugates
- Measurement of samples

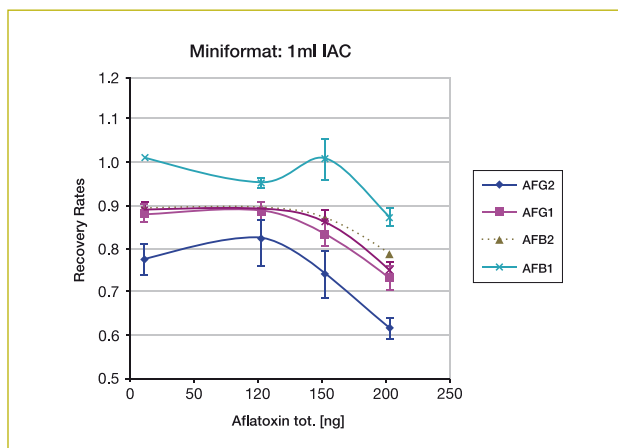
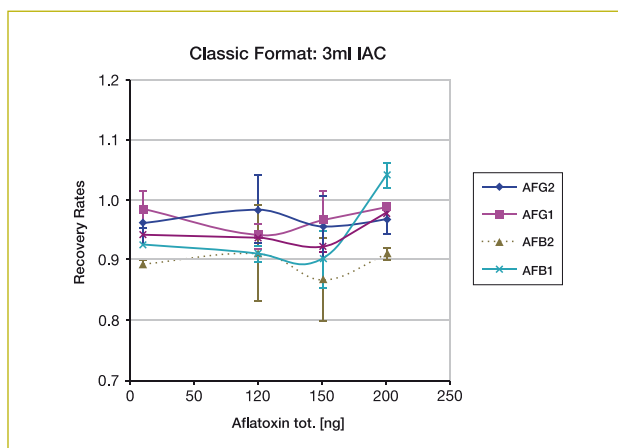
#### **Custom Columns mainly for research and Biotech industry:**

IAC production based on activated cellulose beads using Customized Ligands including antibodies and other proteins, antisera, culture supernatants.

Delivery of ready-to-use columns in various sizes along with a comprehensive column description.

<b>Working range:</b>	
B-TeZ Aflatoxin:	0.01 - 150ng
B-TeZ Aflatoxin M1:	0.08 - 100ng
B-TeZ Ochratoxin:	0.04 - 200ng
B-TeZ DON:	5 - 500ng
B-TeZ Fumonisin:	1 - 500ng
B-TeZ Zearalenon:	5 - 500ng
B-TeZ T2/HT2:	40 - 500ng
B-TeZ Biotin:	0.004 - 5µg
B-TeZ Vitamin B12:	0.01 - 5µg
B-TeZ Folsäure:	0.02 - 5µg

Comparison between Standard Aflatoxin clean up columns of sizes **3ml** and **1ml**.



### Immunoaffinity Procedure:

Immunoaffinity preparation usually has three steps: Binding, washing and elution.

Depending on the ligand, binding and washing steps are performed typically in PBS or similar buffer while elution is usually done using methanol.

### Customized Immunoaffinity

#### Columns or Gel:

We offer pre-activated gel for immobilization of **ligands containing primary and secondary amines** e.g. proteins, peptides and nucleic acids as well as our services at nominal prices with the following specifications:

**Coupling capacity:**  $\geq 15 \mu\text{mol/ml}$

**Spacer:** None

**Cellulose Beads:** Size range 100-250  $\mu\text{m}$

**Long term pH stability:** pH 3-10

**Short term pH stability:** pH 2-12 e.g. for reconstitution

The coupled product has a high chemical stability to commonly used aqueous solutions.

Activated cellulose beads are supplied in acetone.

### General Annotations:

For an optimal coupling efficiency, the coupling reaction should proceed in high concentrated phosphate buffer in the pH range 7-8. Buffer salts with many amino groups should not be used since these salts will couple to the gel and hence will reduce coupling capacity of the gel.

For a typical adsorbent, 550  $\mu\text{moles}$  ligand/ml of gel and for protein ligands, 15 mg protein/ml gel are recommended, but the concentration could be higher.

### Filling the column:

Slurry of gel in binding buffer can be filled in a column using frits of  $\leq 100 \mu\text{m}$  pore size.