



**EuroProxima**  
Close to your analysis

## BISPHENOL A ELISA (5221BPA)

### General

Bisphenol A (BPA) is used in the production of poly carbonate plastics, applied for among others, in bottles for baby food and drinking water. The use of a SPE column sample preparation makes the ELISA also applicable for surface water.

BPA is a known endocrine disruptor, mimicking estrogens and thyroid hormones. Many studies have shown negative health effects in laboratory animals exposed to BPA. EU legislation sets a Specific Migration Limit (SML) of 0.6 ppm BPA in food.

The **Bisphenol A ELISA** is a competitive enzyme immunoassay for the detection of bisphenol A in milk and water samples.

### Kit characteristics

#### **Microtiter plate:**

96 Wells  
12 x 8 Breakapart

#### **Antibody cross-reactivity:**

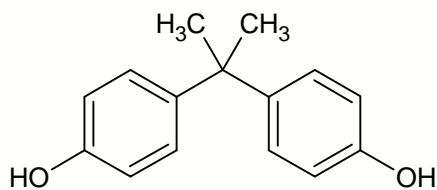
2,2-Bis-(4-hydroxyphenyl)-propane (BPA)	100%
Bis-(4-hydroxyphenyl)-methane (BPF)	0.1%
Bis-(4-hydroxyphenyl)-sulfone (BPS)	6%
4,4-Bis-(4-hydroxyphenyl)valeric acid (BVA)	84.9%
Bisphenol A diglycidyl ether (BADGE)	< 0.1%
Coumestrol	1.5%
4,4'-Cyclohexylidenebisphenol (BPZ)	3.8%

#### **Conjugate:**

BPA-HRP stabilized

#### **Standard range (ready-to-use)**

0, 0.2, 0.5, 1.0, 2.0, 5.0 and 10.0 ng/ml



Chemical structure of Bisphenol A

### Assay characteristics

<b>Matrices</b>	<b>LOD (ppb)</b>
Milk	0.42
(surface) Water	0.009

The Limit of detection (LOD) is calculated as:  $X_n + 3SD$  and is determined under optimal conditions.

#### **Sample preparation**

For milk and water fast and efficient extraction methods are included in the kit manual.

#### **Procedure**

Antibody, conjugate and standard/sample are pipetted into the wells and incubated for 1 hour at 4°C. After a washing procedure ready-to-use substrate is added and incubated for 30 minutes at 20°C - 25°C. The reaction is stopped and the absorbance is read in a spectrophotometer at 450 nm.

EuroProxima's user-friendly software converts the measured optical density into the concentration of the metabolite in the starting material.