KEM Dioxin Biosensor *DXS-600*

Automated analysis of dioxin concentration in a short time

Takes only 10 minutes for analysis of dioxin concentration in the sample dissolved in DMSO (dimethly sulfoxide).

Simple operating procedure and high repeatability

Set prepared sample and reagents and just press "Start" button on your PC, the measurement and analysis will be underway automatically.

Applications

This biosensor is the automatic immunesensor using highly sensitive antibody against dioxins. When used in conjunction with KEM's automatic Sample Preparation Device SPD-600, the analysis of dioxins in flue gas and fly ash emitted from incinerators can be simplified and performed in a short time.

Characteristics

Quick Analysis

The automated measurement and analysis determines total TEQ of dioxins in the sample in approximately minimum 10 minutes.

Such innovative method is made possible by use of highly sensitive antibody recognizing 2,3,4,7,8-PeCDF(F114), which is highly correlated with total TEQ of dioxins, and thus, the total TEQ of dioxins can easily be calculated.

High Reliability

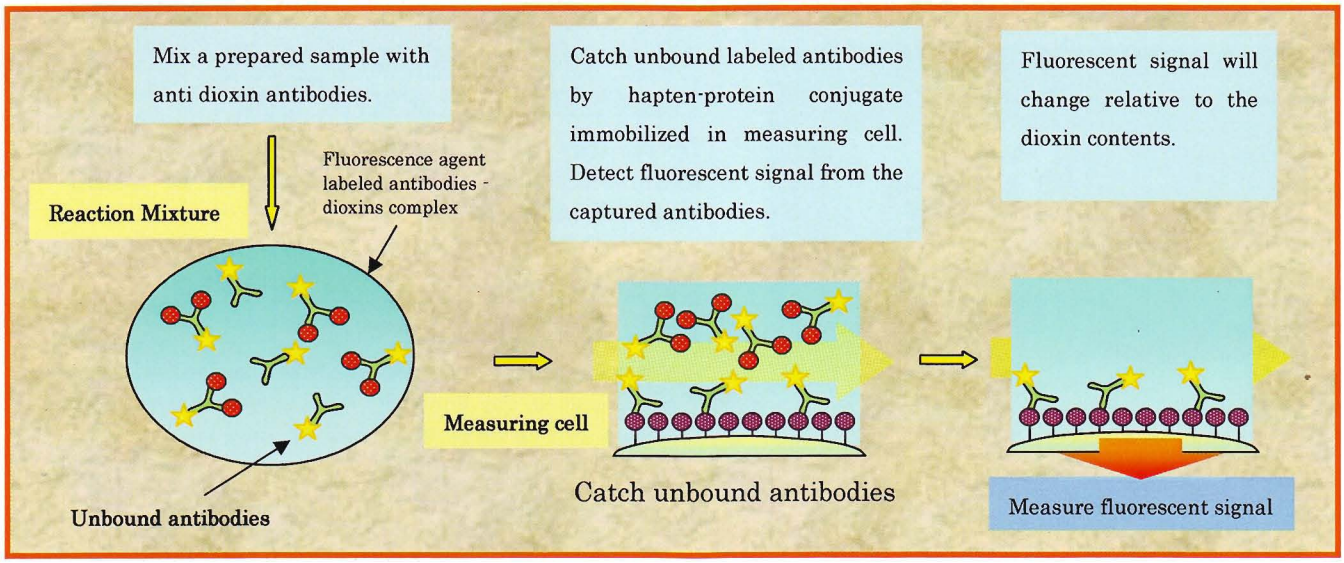
All processes are now automated without any human error involved. The RSD under 3% proves the reliable dioxin analysis.

Simple and Low Cost

Prepare a sample and reagents and press [Start] button on your PC. The measurement and analysis will be underway automatically. The reagent requirement such as antibody is small amount and cost effective.

Principle of measurement

This biosensor is based on kinetic exclusion assay (KinExA ®) which is a flow injection system designed to measure the unbound antibodies after antibody and antigen are allowed to react.



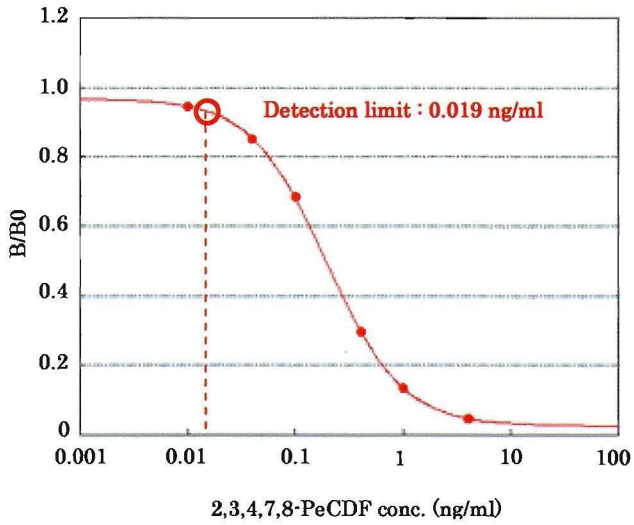
Specifications (prospected)

Sample	Mixture of antibody and prepared sample with Sample Preparation System SPS-600 (DMSO final concentration: 5%)
Dynamic range	0.032 – 0.32ng/ml (2,3,4,7,8-PeCDF) *1)
Repeatability	RSD:Under 3%*2)
Operation time	Minimum 10min.
Sample volume	Minimum 1mL

Since these specifications are under consideration, they are subject to change without notice.

*1) KEM recommended antibody is used.
*2) When repeatedly measured in the same cell.

The dynamic range of 2,3,4,7,8-PeCDF



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KEM **looks to become a new leader for dioxin analytical instrument.**

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