# biosense LABORATORIES

Prod. no. L48200401 Product Description PCB ELISA Kit

**The kit (100 tests),** a magnetic particle format with ready to use reagents, enables faster assay kinetics, super sensitivety, and the simultaneous measurement of multiple samples at a reasonable cost.

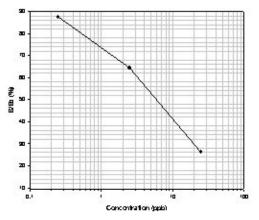
**The assay range** is between 0.25 ppb and 25 ppb (based on aroclor 1254). This supersensitive assay allows the determination of PCBs in a wide range of environmental samples (water, soil, sediments, fish tissue, etc.).

Total time for measurement is less than 45 minutes.

The antibody binds Polychlorinated biphenyls (PCBs) as mixtures (aroclors) and does not cross-react with other non-related industrial compounds.

### **Chemical structure**

Polychlorinated biphenyls (PCBs), are a group of synthetic industrial compounds which contain a varying number of chlorine atoms substituted on a biphenyl molecule. Several industrialized countries produced PCBs, which were marketed under various trade names (Aroclors®, Kanechlors®, etc.). PCBs are chemically inert and stable when heated, these properties had allowed them to persist in the environment for long periods of time. This ELISA test kit detects PCBs in environment samples at the ppt levels.



## PCB (Aroclor 1254) Standard Curve

Samples containing PCBs within the dynamic range (0.25-25 ppb) can be directly tested in the assay after filtration

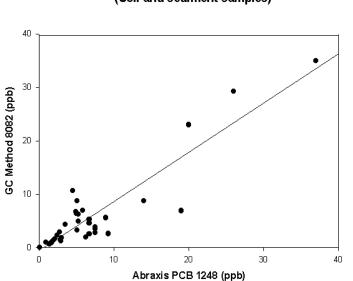
#### **Cross-rectivity Pattern**

Cross-rectivity of the PCB ELISA expressed as the least detectable dose (LDD) which is estimated at 90% B/Bo and at the concentration required to displace 50% (50% B/Bo).

Compound		LDD(ppb)	50% B/Bo(ppb)
Aroclor	1254	0.11	9.0
Aroclor	1260	0.35	4.4
Aroclor	1248	0.40	18
Aroclor	1242	1.3	38
Aroclor	1262	0.25	4.0
Aroclor	1232	0.60	46
Aroclor	1268	0.36	20
Aroclor	1016	0.46	38
Aroclor	1221	1.6	42

The following compounds demonstrated no reactivity in the PCB RaPID Assay at concentrations up to 10,000 ppb: Biphenyl, 2,5-Dichlorophenol, 2,3,5 Trichlorophenol, Di-n-octyl-phthalate

#### **Sample Correlation**



Abraxis ELISA vs. GC Method 8082 (Soil and sediment samples)

This ELISA exhibits high correlation with GC method 8082 (r=0.91)

#### **Kit Format**

Magnetic particle format and and reagents PN 530001

Distributed in Europe by Biosense Laboratories AS

Kit manufactured by Abraxis LLC