



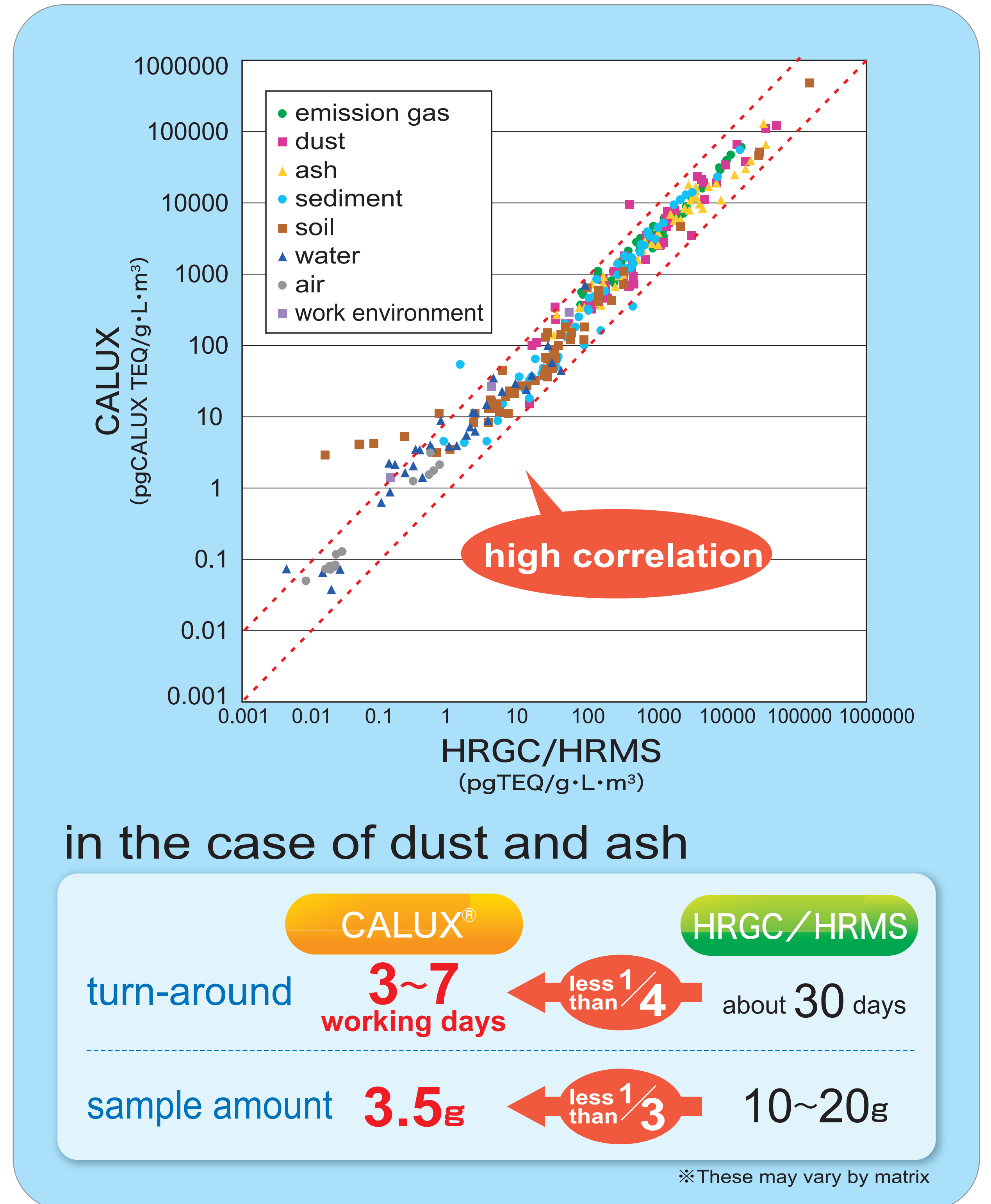
# POPs(Dioxins) screening method CALUX<sup>®</sup> Assay

## Why use CALUX<sup>®</sup> ?

- Merit 1** **more accurate HIGH PRECISION**  
High precision and High correlation with traditional method proven through many Evaluations.
- Merit 2** **faster SHORT TURN-AROUND**  
Unique preparation method has significantly shortened the turn-around.
- Merit 3** **at low cost INEXPENSIVELY**  
No need for expensive analytical instruments. Unique technique has made it possible to shorten analytical process and that has led to cost reduction.

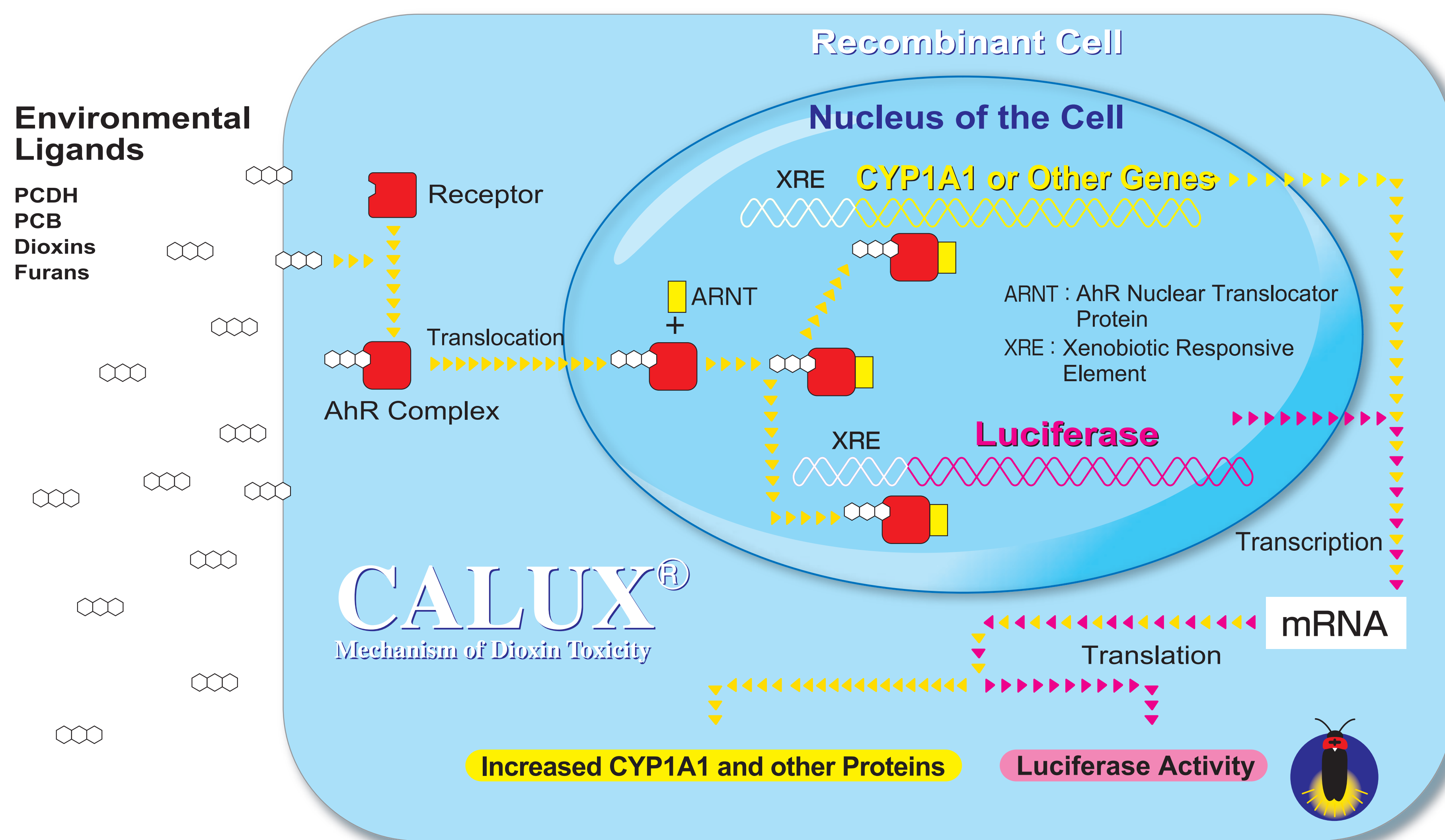
### AND High Sensitivity

- Needs only one-third of sample amount (in case of soil)
- Analyzes a wide variety of sample matrix from environmental as well as low concentration matrix such as food/biological samples. [Detection limit is 1pgTEQ/g with 3.5 g sample (in case of soil)]



## Measures Dioxins with principal of firefly luminescent

The recombinant cell line used in this assay (H1L6.1c2) was generated by stably transfecting the plasmid pGudLuc6.1 into mouse hepatoma (Hepa1c1c7) cells. The pGudLuc6.1 plasmid contains the CYP1A1 dioxin-responsive domain (inclusive of four DREs) upstream of the firefly luciferase gene.



### Approved as an Official Method

- Japanese Industrial Standard Method JIS K0463 in 2009
- EPA Method 4435 in 2007
- EU Directive in 2002
- Ministry of the Environment, Japan in 2005
- Taiwan EPA Soil Standard Screening Method NIEA S901.60B in 2010