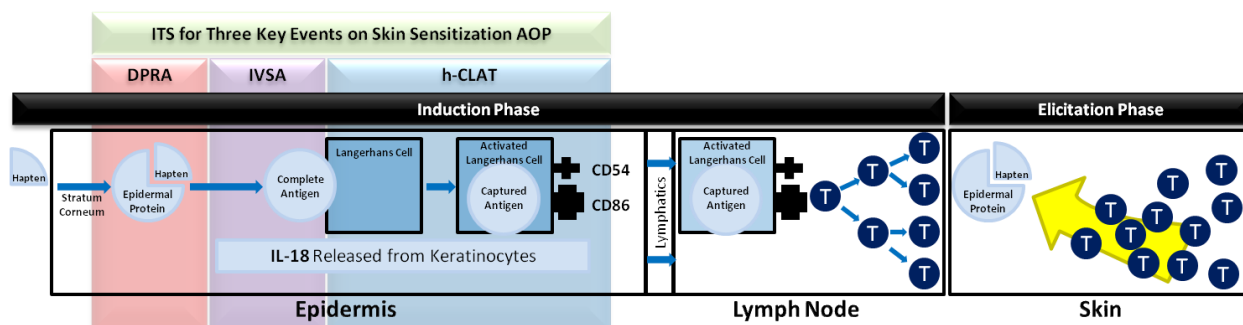


Skin Sensitization—*In Vitro*

Wildlife International has teamed with **MB Research** to provide a **non-animal** Integrated Testing Strategy (ITS) for chemical-induced contact hypersensitivity (skin sensitization). This ITS provides a completely non-animal alternative to traditional testing methods. Together, our three assays address three key events on the skin sensitization adverse outcome pathway (AOP).

Skin Sensitization Adverse Outcome Pathway



MB Research-Wildlife International Integrated Testing Strategy

AOP

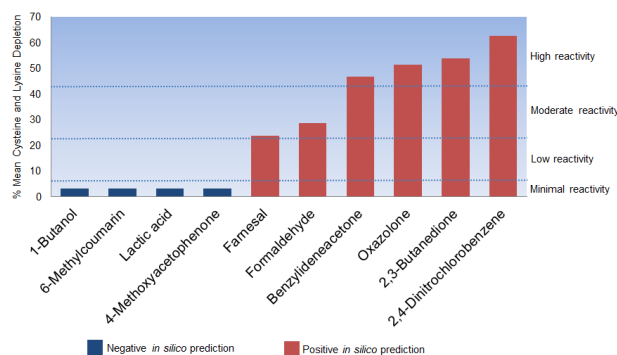
DPRA

The **Direct Peptide Reactivity Assay** (DPRA) is an *in chemico* method used to predict epidermal protein binding. Binding of epidermal proteins is the **molecular initiating event** on the AOP. The DPRA uses HPLC to measure the depletion of synthetic peptides in solution following exposure to test chemicals.

Advantages:

- Regulatory acceptance (OECD 442C)
- High concordance

Peptide Depletion



Validated-OECD-GLP

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IVSA

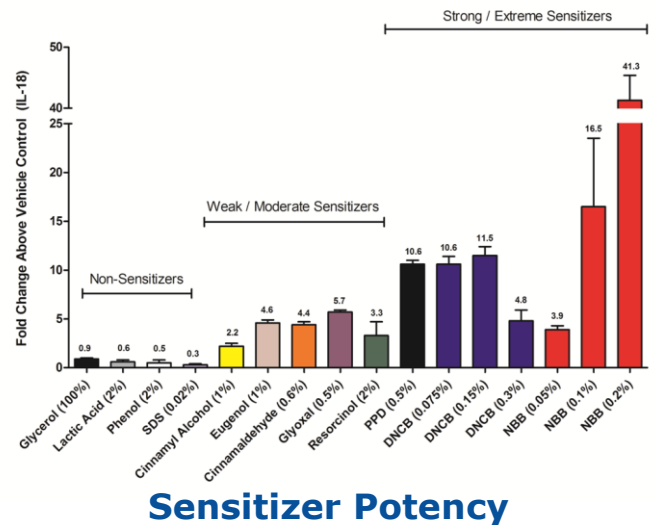
The ***In Vitro* Sensitization Assay** (IVSA) is a keratinocyte activation test. IVSA uses an ELISA method to measure IL-18 release from a topically treated reconstructed 3D human keratinocyte tissue model.

Advantages:

- Insolubility-Compatible
- Predictive of Mixtures

Accurate·Powerful·GLP

Interleukin-18 Release



Sensitizer Potency

h-CLAT

The **Human Cell Line Activation Test** (h-CLAT) is a dendritic cell activation test. The h-CLAT uses flow cytometry to measure CD86 and CD54 expression on treated THP-1 cells in culture.

Advantages:

- Regulatory acceptance
- High concordance

Validated·OECD·GLP

Surface Marker Expression

