

STRESS TEST

Stability „stress“ tests were performed with LowCross® HRP-Stab.

To compare the effects of different storage methods, the antibody-peroxidase-conjugate under test was stored either in a standard assay diluent or in LowCross® HRP-Stab. Storage was done at 45°C over a period of up to 588 days.

The antibody had to bind specifically to the analyte and the HRP-enzyme had to convert the substrate to show activity of the complete conjugate in an ELISA. The remaining activity after storage was determined in percentage to fresh conjugate.

After 251 days incubation at 45°C with LowCross® HRP-Stab the antibody retained around 88% binding activity. This would correspond to a shelf life at 4°C with 88% binding activity of more than 11 years by conservative correlation according to Arrhenius.



Shelf life of an HRP-labeled antibody is measured as signal (= antibody binding + enzymatic activity) in an ELISA after storage under heat stress at 45°C. The concentration of the stored antibody is 400 ng / mL.