Antibodies are useful tools in many research applications. They bind specifically and with high affinity to their targets - as long as they remain in their native conformation. Storage at room temperature or even at 4°C destroys this binding activity. One popular way of avoiding this destruction of activity is freezing the antibodies. But any freezing and thawing cycle decreases a part of the activity. Storing antibodies in BSA-containing solutions was another common way for storage over the years. But many antibodies are not stable when frozen or stored in BSA. Therefore new stabilizers for antibodies were developed to overcome this storage problem for daily routine. CANDOR Bioscience presents the optimized stabilizer solution Antibody Stabilizer. Antibodies and their conjugates can be diluted directly in Antibody Stabilizer for storage. Antibodies don’t have to be frozen any longer. Stability over several years can be achieved for most antibodies simply by storing at 4°C. Thus the antibody-solutions are always ready for direct use for a new experiment in the fridge - without thawing.

Stability test
Stability „stress“ tests were performed with Antibody Stabilizer. To compare the effects of different storage methods, the antibody under test was stored either in a BSA (BSA: 1 mg/ml) containing solution or in Antibody Stabilizer. Storage was done at 45°C over a period of up to 143 days. Percentage of retained activity was determined by binding in an ELISA. After 143 days incubation at 45°C with Antibody Stabilizer the antibody retained around 97% binding activity. This shows a shelf life at 4°C with 97% binding activity of more than 6 years by conservative correlation according to Arrhenius.

Ready-to-use
Antibodies can be stored in stock solutions (e.g. diluted 1:20 in Antibody Stabilizer) or even at very low concentrations. Antibody Stabilizer is available based on TRIS (130) or based on PBS (131).
Preservative: contains 0.1% ProClin® 300
Available package sizes: 50 ml order number 130 050 (131 050)
125 ml order number 130 125 (131 125)
500 ml order number 130 500 (131 500)
Antibody Stabilizer is available in bulk quantities to manufacturers of test kits.

Heat stress test at 45°C

Fig. 1: Shelf life of an antibody is measured as binding in an ELISA after storage under temperature stress at 45°C. The tests were performed with an antibody-concentration of only 400 ng/ml.