

Comparison of an Indirect Format ELISA on Modified Graphite and Polystyrene Surfaces against Triazines

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Z. Naturforsch. **61c**, 295–301 (2006); received December 27, 2005/January 23, 2006

An indirect format enzyme-linked immuno-sorbent assay (ELISA) on graphite rods (\varnothing 0.8 mm \times 20 mm) and, for comparison, on microtiter plates has been developed against terbuthylazine. For this purpose, a series of 2-aminoalkyl-4-chloro-6-terbuthyl-*s*-triazine-2,6-diamine ELISA haptens with alkyl spacer lengths of 2, 4, 6, and 8 CH₂ groups has been synthesized. The graphite rods or the microtiter plates were covered by a polymerized glutaraldehyde network, and the ELISA haptens have been coupled by imino coupling to the free aldehyde groups of that network. ϵ -Aminocaproic acid has been used as an agent to block unspecific binding sites. The ELISA was run in a competitive mode, where the immobilized ELISA hapten and the solute terbuthylazine as a target analyte compete for the solute antibody.

Key words: Indirect Format ELISA, Graphite, Triazines