ALK’s polyclonal anti-IgE antibody is distinguished from other conventional polyclonal antibodies by the rigorous affinity purification process used to produce it. Our affinity chromatography process ensures that ALK’s ACTT ELISA assay maintains both high sensitivity and high specificity for IgE, resulting in the most accurate test results.

Multiple protein chemistry purification techniques are employed before final purification by affinity chromatography, further assuring an exceptional level of antibody purity. ALK’s affinity pure, polyclonal antibody is uniquely qualified to accurately and reliably detect serum IgE.

**Antiserum Absorption and Immunoglobulin Purification**

Antiserum, produced in a goat against purified IgE, is absorbed to remove cross-reactive, non-IgE-specific antibodies: first with purified IgG, then by species-matched serum from which IgE has been removed. These two absorption steps are highly effective in removing non-specific antibodies that recognize IgG and other serum proteins.

Immunoglobulin from absorbed antiserum is then purified using standard protein purification techniques. Antibodies reacting only with IgE are further selected by affinity purification of absorbed anti-IgE on immobilized, purified IgE.

**Affinity Chromatography Purification Process**

**Step 1:**
Purified, absorbed, anti-IgE antibody is added to affinity purification column containing IgE-coated agarose beads.

**Step 2:**
Anti-IgE antibodies bind to IgE-coated beads. Any residual non-specific antibodies that may be present fail to bind and remain in solution.

**Step 3:**
After washing, only anti-IgE antibodies remain, bound to the IgE-coated beads.

**Step 4:**
Specifically-bound anti-IgE antibodies are removed from IgE-coated beads using a chemical process called elution.

Affinity-pure, anti-IgE antibodies.

Affinity purification beads with anti-IgE removed can be re-used to affinity-purify additional antibodies.

Y Anti-IgE antibody
● IgE-coated bead
Y Non-specific antibody