

## Product datasheet for **AP31549SU-N**

### PAEP Rabbit Polyclonal Antibody

#### Product data:

**Product Type:** Primary Antibodies

**Applications:** ID, IP

**Recommended Dilution:** Can be used as precipitating antiserum to identify or measure bovine beta-lactoglobulin by a variety of immunodiffusion techniques, including immunoelectrophoresis, single and double radial immunodiffusion (Mancini, Ouchterlony) and electroimmunodiffusion (Laurell). It has not been tested for use in nephelometry, ELISA or immunochemistry, but this does not exclude such use if proper controls are included.

***Directions for use:***

In immunoelectrophoresis use 2 µl serum, plasma or equivalent against 120 µl antiserum.

In double radial immunodiffusion (Ouchterlony) use a rosette arrangement with 10 µl antiserum in a 3 mm diameter centre well and 2 µl serum samples (neat and serially diluted) in 2 mm diameter peripheral wells.

In single radial immunodiffusion and electroimmunodiffusion use 0.5 to 1.0 percent antiserum in the agar gel.

**Reactivity:** Bovine

**Host:** Rabbit

**Clonality:** Polyclonal

**Immunogen:** Beta-lactoglobulin is the dominant protein in bovine milk, synthesized in mammary gland tissue. It is a glycoprotein present mainly as a dimer at intermediate concentrations near the isoelectric point. The molecular weight of the monomeric subunit is near 17,000. It is very sensitive to denaturation. Any treatment of native milk and also prolonged storage in the deepfreeze will lead first to polymerization (octamers and higher polymers) aggregation and finally to denaturation. Three genetic variants A, B and C have been identified. They differ very little in the amino acid constellation and their behavior under pH and temperature various conditions. No immunological differences were found between the variants. Beta-lactoglobulin can be purified in crystallized form. Allergic reactions of infants to bovine milk proteins are well known. The actual process by which such reactions develop and their impact on the infant's health have not been unambiguously established. Circulating antibodies to beta-lactoglobulin have been demonstrated in sera of some infants. Freund's complete adjuvant is used in the first step of the immunization procedure.



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<b>Specificity:</b>	<p>The defined antibody specificity is directed to beta-lactoglobulin as tested against bovine milk. In immunoelectrophoresis and double radial immunodiffusion (Ouchterlony) no reaction has been obtained with bovine serum.</p> <p><b>Cross-reactivity:</b> Homologous proteins of different species frequently share antigenic determinants. Cross-reactivity has been observed with milk of sheep and goat.</p>
<b>Formulation:</b>	<p>State: Serum</p> <p>State: Delipidated, heat inactivated, lyophilized, stable whole antiserum</p> <p>Preservative: No preservative added. - No foreign proteins added</p>
<b>Reconstitution Method:</b>	Restore with 1 ml sterile distilled water
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	<p>Prior to reconstitution store at 2-8°C.</p> <p>Following reconstitution store undiluted at 2-8°C for one week or (in aliquots) at -20°C for longer.</p> <p>Avoid repeated freezing and thawing.</p>
<b>Stability:</b>	Shelf life: one year from despatch.
<b>Database Link:</b>	<p><a href="#">Entrez Gene 280838 Bovine P02754</a></p>
<b>Synonyms:</b>	Beta-LG, LGB, Allergen Bos d 5
<b>Note:</b>	<p><b>Adsorption:</b> Immunoaffinity adsorbed using insolubilized antigens as required, to eliminate antibodies reacting with other serum proteins. The use of insolubilized adsorption antigens prevents the presence of excess adsorbent protein or immune complexes in the antiserum.</p> <p><b>Antibody titre:</b> Precipitin titre not less than 1/16 when tested against normal bovine milk in agar block immunodiffusion titration.</p>