

Description	Precipitating polyclonal rabbit antiserum to bovine beta-lactoglobulin	
Product code	RAB/BLgl	
Biological origin	Rabbit	
Physical form	Delipidated, heat inactivated, lyophilized, stable whole antiserum	
Preservative	No preservative added.	
Immunogen	<p>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 an their behavior under pH and temperature various conditions. No immunological differences was found between the variants. Beta-lactoglobulin can be purified in crystallized form.</p> <p>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.</p>	
Adsorption	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.	
Identity & Specificity	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.	
Cross-reactivity	Homologous proteins of different species frequently share antigenic determinants. Cross-reactivity has been observed with milk of sheep and goat.	
Protein concentration	Total protein and IgG concentrations in the antiserum are comparable to those in pooled rabbit serum. No foreign proteins added.	
Antibody titre	Precipitin titre not less than 1:16 when tested against normal bovine milk in agar block immunodiffusion titration.	
Intended use	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.	
Handling	The lyophilized antiserum is shipped at ambient temperature and may be stored at +4°C; prolonged storage at or below -20°C. Reconstitute the lyophilized antiserum by adding 1 ml sterile distilled water. Dilutions may be prepared by adding phosphate buffered saline (PBS, pH 7.2). Repeated thawing and freezing should be avoided. If a slight precipitation occurs upon storage, this should be removed by centrifugation. It will not affect the performance of the antiserum. Diluted antiserum should be stored at +4°C, not refrozen, and preferably used the same day.	
Packing	Vial with 1 ml lyophilized antiserum.	
Storage / shelf life	Lyophilized at +4°C	at least 10 years
	reconstituted at or below -20°C	3-5 years
	reconstituted at +4°C	7 days
Caution	This product should be handled by qualified persons only and appropriate precautions should be taken in its handling and disposal, and of all associated materials. For <i>in vitro</i> laboratory research purposes only.	

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