Description	**Precipitating polyclonal sheep antiserum to human secretory component**
Product code	ShAHu/SC
Biological origin	Sheep
Physical form	Delipidated, heat inactivated, lyophilized, stable whole antiserum
Preservative	No preservative added.
Immunogen	Secretory component is present in human secretions bound to secretory IgA (sIgA) and in free form. Secretory IgA (sIgA) functions as a dimer or polymer and accounts for almost all specific mucosal antibody activity. A molecule of sIgA is made up of two molecules of IgA, one J chain and one SC (MW 65,000). The dimer IgA is transported into secretions by its binding to the SC on the epithelial cells. Under normal conditions, sIgA contains both subclasses IgA1 and IgA2, since both are capable of binding SC. Secretory component also has an affinity for polymeric IgM. Purified free human secretory component isolated from pooled milk is used for immunization. Freund's complete adjuvant is used in the first step of the immunization procedure.
Adsorption	Immunoaffinity adsorbed using insolubilized antigens as required to eliminate antibody activity to any other serum protein. The use of insolubilized adsorption antigens prevents the presence of excess adsorbent protein or immune complexes in the antiserum.
Identity & Specificity	Tested in immunoelectrophoresis, double radial immunodiffusion and ELISA against a panel of appropriate secretions and purified Ig isotypes. The antiserum reacts with both bound secretory component (secretory IgA) and with the free SC present in human secretions. In immunoelectrophoresis against human milk, using a high electroendosmosis agar plate, free SC is precipitated in the alph-2 region. The antiserum does not react with other molecular forms of IgA, or with any other secretory or plasma protein.
Cross-reactivity	Inter-species cross-reactivity is a normal feature of antibodies to serum proteins, since homologous proteins of different species frequently share antigenic determinants. Cross-reactivity of this antiserum has not been tested in detail.
Protein concentration	Total protein and IgG concentrations in the antiserum are comparable to those of pooled normal sheep serum. No foreign proteins added.
Antibody titre	Precipitin titre 1:32 when tested against pooled normal human milk in agar-block immunodiffusion titration.
Intended use	In precipitating techniques as immunoelectrophoresis and single and double radial immunodiffusion to identify the presence secretory component in human serum or other body fluids and to determine its concentration.
Directions for use	In immunoelectrophoresis use 2 µl serum or equivalent against 120 µl antiserum. In double radial immunodiffusion use a rosette arrangement with 10 µl antiserum in 3 mm diameter centre well and 2 µl serum samples (neat and serially diluted) in 2 mm diameter peripheral wells.
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 antiserum should be handled by qualified persons only and appropriate precautions should be taken in its handling and disposal, and of all associated materials. For *in vitro* research purposes only.

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