Description	**Horseradish peroxidase-conjugated IgG fraction of polyclonal sheep antiserum to mouse IgG2a(1a), allotype specific**
Product code	ShAM/IgG2a(1a)/PO
Biological origin	Sheep
Physical form	Horseradish peroxidase-coupled hyperimmune IgG fraction, lyophilized from a solution in phosphate buffered saline (pH7.2).
Preservative	No preservative added, as it may interfere with the antibody activity.
Immunogen	Highly purified normal homogenous IgG2a(1a) isolated from mouse serum. Freund's complete adjuvant is used in the first step of the immunization procedure.
Purification	The IgG (7S) fraction is isolated and purified from selected antisera and contains the of the defined antibody specificity. It is free of other serum proteins as tested by immunoelectrophoresis and double radial immuno-diffusion.
Adsorption	Immunoaffinity adsorbed using insolubilized antigens as required, to eliminate antibodies cross-reacting with other components of the immunoglobulin system or 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 reactivity of the antiserum is restricted to the Fc portion of the IgG2a molecule. In immunoelectrophoresis and radial immunodiffusion, using various antiserum concentrations against mouse serum of the allelic type Igh-1a, including Balb/C, CBA AKR and NZB, a single characteristic precipitin line is obtained which shows a reaction of identity with the precipitin line obtained with purified IgG2a(1a). No precipitation reaction is obtained with purified IgG2a(1b) (C57Bl and SJL/J), other IgG subclasses, IgA, IgM, IgG/Fab fragments or other serum proteins.
Cross-reactivity	The antiserum does not cross-react with any other component of the mouse Ig system. Inter-species cross-reactivity is a normal feature of antibodies to immunoglobulins, since Ig of different species frequently share antigenic determinants. Cross-reactivity of this antiserum has not been tested in detail; expected chance of cross-reactivity will be small.
Physicochemical characteristics	IgG protein concentration 10 mg/ml. Peroxidase/IgG protein molar ratio (E/P) is approximately 1.7. No foreign proteins added.
Enzyme marker	Horseradish peroxidase enriched for isoenzyme C (RZ=3.2).
Manufacturing procedure	Conjugation is carried out using a proprietary modification of the periodate technique for the binding to peroxidase, followed by several purification steps. After each step activity and specificity are tested in a variety of techniques. The conjugate is lyophilized to assure stability and long shelf life. No foreign protein has been added.
Intended use	In enzyme-immunocytochemical and immunohistochemical staining for the detection of Igg2a(1a) at the cellular an subcellular level. In non-isotopic assay methodology (e.g. ELISA and Western blotting) to identify and measure IgG2a(1a) in mouse serum or other body fluids. *This immunoconjugate is not pre-diluted. Its optimum working dilution should be established by titration. Excess labelled antibody may by itself cause high unspecific background staining or interfere with the specific signal.* Working dilutions fro histochemical and cytochemical use are usually between 1:50 and 1:200; in ELISA and comparable non-precipitating antibody-binding assays between 1:100 and 1:1,000. These data should be interpreted as general recommendations only.
Handling	The lyophilized conjugate is shipped at ambient temperature and may be stored at +4°C; prolonged storage at or below -20°C. It is reconstituted by adding 1 ml sterile distilled water, spun down to remove insoluble particles, divided into small aliquots, frozen and stored at or below -20°C. Prior to use, an aliquot is thawed slowly in the dark at ambient temperature, spun down again and used to prepare working dilutions by adding sterile phosphate buffered saline (PBS, pH 7.2). Repeated thawing and freezing should be avoided. Working dilutions should be stored at +4°C, not refrozen, and preferably used the same day. If a slight precipitation occurs upon storage, this should be removed by centrifugation. It will not affect the performance of the immunoconjugate.
Packing	Vial with 1ml lyophilized immunoconjugate.
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 immunoconjugate 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* laboratory research purposes only.

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