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|--|--|-------------------|----------|----------|--------|---------|----------|-----------|---------------|----------|---------|-------|---------|----------|---------|
| <b>Description</b>                     | <b>Biotin-conjugated IgG fraction of polyclonal rabbit antiserum to rat albumin</b>  |                   |          |          |        |         |          |           |               |          |         |       |         |          |         |
| <b>Product code</b>                    | RARa/Alb/Bio   |                   |          |          |        |         |          |           |               |          |         |       |         |          |         |
| <b>Biological origin</b>               | Rabbit   |                   |          |          |        |         |          |           |               |          |         |       |         |          |         |
| <b>Physical form</b>                   | Purified hyperimmune rabbit IgG lyophilized from a solution in phosphate buffered saline (PBS, pH 7.2).  |                   |          |          |        |         |          |           |               |          |         |       |         |          |         |
| <b>Preservative</b>                    | No preservative added, as it may interfere with the antibody activity.   |                   |          |          |        |         |          |           |               |          |         |       |         |          |         |
| <b>Immunogen</b>                       | Albumin is a stable small polypeptide with a strong antigenicity. Its molecular weight is about 69,000. It has a high mobility in electrophoresis, shows macro-heterogeneity especially under pathological conditions and it can bind a large number of physiological and non-physiological molecules. Albumin is isolated from rat serum by sequential precipitation and purified by ion exchange chromatography and affinity chromatography. Freund's complete adjuvant is used in the first step of the immunization procedure.   |                   |          |          |        |         |          |           |               |          |         |       |         |          |         |
| <b>Purification</b>                    | Hyperimmune antisera with strong precipitating activity are selected for fractionation by salt-precipitation and purification of the IgG (7S) fraction by DEAE-chromatography.   |                   |          |          |        |         |          |           |               |          |         |       |         |          |         |
| <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.   |                   |          |          |        |         |          |           |               |          |         |       |         |          |         |
| <b>Identity &amp; Specificity</b>      | <p>The defined antibody specificity is directed to albumin as tested against rat sera. In immunoelectrophoresis and double radial immunodiffusion (Ouchterlony), using various antiserum concentrations against appropriate concentrations of the immunogen, a single characteristic precipitin line is obtained which shows a reaction of identity with the precipitin lines obtained against rat serum and the purified albumin.</p> <table border="0" style="margin-left: 40px;"> <tr> <td>bovine -</td> <td>goat -</td> <td>human ±</td> <td>rabbit -</td> </tr> <tr> <td>chicken -</td> <td>guinea pig ++</td> <td>monkey +</td> <td>sheep -</td> </tr> <tr> <td>dog -</td> <td>horse ±</td> <td>mouse ++</td> <td>swine ±</td> </tr> </table> <p>A negative cross-reaction in double radial immunodiffusion does not exclude some reaction in more sensitive techniques.</p>                     |                   |          | bovine - | goat - | human ± | rabbit - | chicken - | guinea pig ++ | monkey + | sheep - | dog - | horse ± | mouse ++ | swine ± |
| bovine -                               | goat -   | human ±           | rabbit - |          |        |         |          |           |               |          |         |       |         |          |         |
| chicken -                              | guinea pig ++  | monkey +          | sheep -  |          |        |         |          |           |               |          |         |       |         |          |         |
| dog -                                  | horse ±  | mouse ++          | swine ±  |          |        |         |          |           |               |          |         |       |         |          |         |
| <b>Cross-reactivity</b>                | Inter-species cross-reactivity is a normal feature of antibodies to mammalian serum proteins, since homologous proteins of different species frequently share antigenic determinants. The degree of cross-reactivity is also dependent on the concentrations of the reactants and the sensitivity of the assay arrangement. This antiserum fraction has been tested for cross-reactivity by double radial immunodiffusion against several species sera with the following results:   |                   |          |          |        |         |          |           |               |          |         |       |         |          |         |
| <b>Physicochemical characteristics</b> | IgG protein concentration 10 mg/ml. Biotin/IgG protein molar ratio (B/P) approximately 6.1. No foreign proteins added.   |                   |          |          |        |         |          |           |               |          |         |       |         |          |         |
| <b>Marker</b>                          | N-Hydroxysuccinimidobiotin   |                   |          |          |        |         |          |           |               |          |         |       |         |          |         |
| <b>Intended use</b>                    | <p>In immunocytochemical and immunohistochemical use for the detection of albumin at the cellular and subcellular level by staining of appropriately treated cell and tissue substrates; in non-isotopic assay methodology (e.g. ELISA) to measure albumin in rat serum or other body fluids. As a second step an avidin or streptavidin conjugate of the user's choice has to be used.</p> <p><i>This immunoconjugate is not pre-diluted. The optimum working dilution of each conjugate should be established by titration before being used. Excess labelled antibody must be avoided because it may cause high unspecific background staining and interfere with the specific signal.</i></p> <p>Working dilutions for histochemical and cytochemical use are usually between 1:100 and 1:500; in ELISA and comparable non-precipitating antibody-binding assays between 1:5,000 and 1:20,000.</p> |                   |          |          |        |         |          |           |               |          |         |       |         |          |         |
| <b>Handling</b>                        | The lyophilized immunoconjugate 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 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 product.   |                   |          |          |        |         |          |           |               |          |         |       |         |          |         |
| <b>Packing</b>                         | Vial with 1 ml lyophilized immunoconjugate.  |                   |          |          |        |         |          |           |               |          |         |       |         |          |         |
| <b>Storage / shelf life</b>            | Lyophilized at +4°C  | at least 10 years |          |          |        |         |          |           |               |          |         |       |         |          |         |
|  | reconstituted at or below -20°C  | 3-5 years         |          |          |        |         |          |           |               |          |         |       |         |          |         |
|  | reconstituted at +4°C  | 7 days            |          |          |        |         |          |           |               |          |         |       |         |          |         |
| <b>Caution</b>                         | 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 <i>in vitro</i> laboratory research purposes only.   |                   |          |          |        |         |          |           |               |          |         |       |         |          |         |

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