

Llama IgG2 Rabbit Polyclonal
ATS-SELECT SECONDARY ANTIBODY

Catalog Number: AS-316
Quantity: 500 milligram
Format: IgG, Liquid (sterile filtered)
Host: Rabbit
Immunogen: Llama IgG2

Background: Camelids produce functional IgG isotypes that do not incorporate light chains. Comparative studies of old world camelids (*Camelus bactrianus* and *Camelus dromedarius*) and new world camelids (*Lama pacos*, *Lama glama* and *Lama vicugna*) have shown that heavy-chain-only immunoglobulins represent between 35% - 70% of total IgG in the sera of all species. At present, three subclasses of camelid IgG have been identified (IgG1, IgG2, IgG3), of which IgG2 and IgG3 lack the light chains. IgG2 consists of dimers of short heavy chains, which are characterized by a normal Fc region without a CH1 domain. IgG2 shows a molecular weight of approximately 90 kDa and this smaller size improves its bio-distribution and allows a better tissue penetration. Of special importance is the long complementary determining region (CDR) loop which inserts deep into the active site of an enzyme enabling a complete neutralization of an enzyme. Anti-Llama IgG2 generated in rabbit detects specifically Llama IgG2 isotype. This anti-Llama secondary Antibody is suitable for western blot, ELISA, CHIP and immunohistochemistry as well as other more general immunoassays.

Specificity & Preparation: Anti-Llama IgG2 antibody is directed against Llama IgG2 with minimal cross-reactivity to Llama IgG3 and Llama IgG1. Anti-Llama IgG2 antibody was prepared from monospecific antiserum by immunoaffinity chromatography. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-rabbit serum, Llama IgG2 and Llama Serum. Specificity was confirmed by ELISA. For IgG1 and IgG3 reactivity was less than 5% against target (IgG2). This antibody does not recognize recombinant VHH with IgG3 background.

Usage: Antibody Anti-Llama IgG2 has been tested by ELISA, dot blot, and western blot and is suitable for immunoblotting (western or dot blot), ELISA, and immunohistochemistry assays requiring lot-to-lot consistency.

ELISA 1:60,000

Immunohistochemistry User Optimized

Western Blot 1:20,000-1:40,000

Working dilutions must be determined by end user.

Storage: Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use. Expiration date is one (1) year from date of receipt.

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