

IgA (AD3): sc-66168

BACKGROUND

Immunoglobulins are four-chain, Y-shaped, monomeric structures comprised of two identical heavy chains and two identical light chains held together through interchain disulfide bonds. The chains form two domains, the Fab (antigen binding) fragment and the Fc (constant) fragment. Immunoglobulin A (IgA) is the main protein of the mucosal immune system. It is generated by B cells in gut-associated lymphoid tissues. Daily production of IgA exceeds that of any of the other immunoglobulins. The IgA heavy chain is an α -chain, and the light chains are either κ - or λ - chains. IgA exists mainly in dimers but can also exist as polymers or as monomers. Dimers and polymers contain a joining (J) chain that can be bound by the polymeric immunoglobulin receptor (pIgR) for transportation of the molecule to mucosal surfaces.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: IGHA1 (human) mapping to 14p13.

SOURCE

IgA (AD3) is a mouse monoclonal antibody raised against purified IgA of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

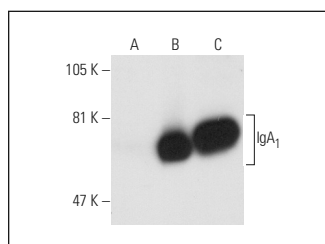
IgA (AD3) is recommended for detection of α -chain of IgA1 and IgA2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight (predicted) of IgA: 38 kDa.

Molecular Weight (observed) of IgA: 52-69 kDa.

Positive Controls: IgA₁ (h2): 293T Lysate: sc-114781 or human PBL whole cell lysate.

DATA



IgA (AD3): sc-66168. Western blot analysis of IgA₁ expression in non-transfected 293T: sc-117752 (A), human IgA₁ transfected 293T: sc-114781 (B) and human PBL (C) whole cell lysates.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.