

# IgG<sub>1</sub> (H143.225.8): sc-69815

## BACKGROUND

IgG is a monomeric immunoglobulin composed of two heavy chains and two light chains. There are four subclasses of IgG: IgG<sub>1</sub>, IgG<sub>2</sub>, IgG<sub>3</sub> and IgG<sub>4</sub>. Each molecule has two antigen binding sites. IgG is the most abundant immunoglobulin as well as the only isotype that can pass through the placenta, thereby providing protection to the fetus in its first weeks of life before its own immune system has developed. IgG can bind to several different kinds of pathogens, for example viruses, bacteria and fungi, and it protects the body against them by complement activation (the classic pathway), opsonization for phagocytosis and neutralization of their toxins.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Ighg1 (mouse) mapping to 12 F1.

## SOURCE

IgG<sub>1</sub> (H143.225.8) is a rat monoclonal antibody raised against IgG<sub>1</sub> of mouse origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

IgG<sub>1</sub> (H143.225.8) is recommended for detection of IgG<sub>1</sub> heavy chain of mouse origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1  $\mu$ g per 1 x 10<sup>6</sup> cells).

Molecular Weight of IgG<sub>1</sub>: 41 kDa.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.