SANTA CRUZ BIOTECHNOLOGY, INC.

Intercalated DNA (402): sc-66060

BACKGROUND

DNA (deoxyribonucleic acid) exists, most commonly, as two intercoiled double strands (known as a double helix) that are supported by a sugar backbone and are linked via hydrogen bonds between the four bases (guanine, cytosine, adenine and thymine). Molecules (ligands) can interact with DNA via electrostatically binding, covalently binding or intercalating which occurs when ligands insert themselves within the double helix, specifically between the bonded base pairs. Intercalated DNA generally contains aromatic, planar ligands, such as ethidium bromide, proflavine, daunomycin or doxorubicin, whose presence prevents base pair bonding, distorts DNA structure and, ultimately, inhibits DNA replication. DNA intercalators are often used in the treatment of rapidly growing cancer cells, such as those in Hodgkin's lymphoma, as they effectively prevent cell replication and thus, slow cancer growth.

REFERENCES

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SOURCE

Intercalated DNA (402) is a mouse monoclonal antibody raised against ethidium bromide intercalated calf thymus DNA.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Intercalated DNA (402) is recommended for detection of Intercalated DNA by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000); non cross-reactive with single or double-stranded DNA or with ethidium bromide.

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.