



Thioguanine (HYB 125-03): sc-58056

BACKGROUND

Thioguanine is an antineoplastic compound that is clinically used in the treatment of cancer, mainly acute leukemias and chronic myeloid leukemias. Thioguanine is a guanine analog with a molecular weight of 167.19 g/mol and a half life ranging from 25 to 240 minutes with an average of about 80 minutes. Thioguanine has antimetabolite action. Once inside the cell, Thioguanine is transformed into 6-Thioguanosine 5'-monophosphate (TGMP) which functions by interfering with the synthesis of guanine nucleotides by pseudo-feedback interference with purine biosynthesis. This results in the induction of cell cycle arrest and apoptosis. Some of the activity of Thioguanine may also be due to the incorporation of Thioguanine nucleotides into both RNA and DNA.

REFERENCES

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SOURCE

Thioguanine (HYB 125-03) is a mouse monoclonal antibody raised against 9-substituted Thioguanine linked to PPD.

PRODUCT

Each vial contains 100 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

Thioguanine (HYB 125-03) is recommended for detection of Thioguanine by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with a variety of Thioguanine analogues; non cross-reactive with 6-(methylthio)purine, 6-thioxanthine, 2-amino-8-phenyl-6-purinethione and 6-(methylthio)purine riboside.

STORAGE

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

PROTOCOLS

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