

Intercalated DNA Monoclonal Antibodies

ORDERING INFORMATION

Catalog No.	Clone No.	MAb Subtype	Size	Library Pack No.	100ug/clone
12401	ET602.2	IgG2b	100ug, 500ug	124111	2 clones
12402	ET749.4	IgG1	100ug, 500ug		

Format: Protein G-purified antibody in PBS, pH 7.4.

BACKGROUND

Ethidium bromide (EB) found fame in the late 1940s as an antitrypanosomal, antimicrobial, antibacterial, and antiviral agent. Its biological effects are a direct consequence of the inhibition of nucleic acid synthesis, which in turn is related to the specific binding of the drug to DNA. EB inhibits DNA polymerase and binds *in vitro* to both RNA and DNA. Investigation into the precise nature of the DNA-EB binding mechanism led to the discovery that EB binds by a mechanism termed intercalation. This process has been studied extensively during the past three decades, and the photophysical changes that accompany intercalation have been successfully applied to quantitate and structurally elucidate DNA. More relevant to the use of EB in molecular biology are the observed variations in its fluorescent characteristics on binding to polynucleotides.

SPECIFICATION SUMMARY

Antigen: Ethidium bromide intercalated calf thymus DNA.

Host Species: Mouse

Specificity: These antibodies specifically recognize intercalated eukaryotic DNA and do not cross-react with single or double-stranded non-intercalated DNA or with ethidium bromide.

APPLICATIONS

These antibodies may be used in ELISA to detect and quantitate intercalated DNA.

DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical to that used in the assay system.

STORAGE AND STABILITY

These antibodies are stable for at least one (1) year at -20°C to -70°C. Store product in appropriate aliquots to avoid multiple freeze-thaw cycles.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.