

Taxol (29B7B3C): sc-69900

BACKGROUND

Taxol, also known as paclitaxel, is a mitotic inhibitor derived from the bark of the Pacific yew tree (*Taxus brevifolia*). It is widely used in cancer chemotherapy as an anticancer drug, treating patients with ovarian, lung, breast, prostate, head and neck cancer, as well as other neoplasms. Taxol functions by disrupting the normal microtubule growth during cell division. More specifically, Taxol binds to β Tubulin, promoting polymerization and stabilization of microtubules, resulting in G₂/M phase arrest and subsequent apoptosis. Despite its success in anticancer drug treatment, Taxol has been associated with drug resistance and cross resistance with other chemotherapy drugs as well as serious side effects. One major side effect of Taxol is peripheral neurotoxicity, in which Taxol affects large myelinated nerve fibers causing mixed motor and sensory dysfunction leading to severe disabling symptoms.

REFERENCES

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SOURCE

Taxol (29B7B3C) is a mouse monoclonal antibody raised against Taxol-BSA conjugate.

PRODUCT

Each vial contains 200 μ g IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Taxol (29B7B3C) is recommended for detection of Taxol and taxotere by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); may cross-react with cephalomannine and 7-epitaxol; useful in Tubulin disassembly assays and cytotoxicity studies using Taxol derivatives.

Molecular Weight of Taxol: 853.906 g/mol.

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.