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# Sodium Selenite

National Cancer Institute

## Source

National Cancer Institute. *Sodium Selenite*. NCI Thesaurus. Code C87346.

An inorganic form of the trace element selenium with potential antineoplastic activity. Selenium, administered in the form of sodium selenite, is reduced to hydrogen selenide (H<sub>2</sub>Se) in the presence of glutathione (GSH) and subsequently generates superoxide radicals upon reaction with oxygen. This may inhibit the expression and activity of the transcription factor Sp1; in turn Sp1 down-regulates androgen receptor (AR) expression and blocks AR signaling. Eventually, selenium may induce apoptosis in prostate cancer cells and inhibit tumor cell proliferation.