Prodigiosin

Prodigiosin is an intensely red pyrrole pigment produced by several bacteria, most notably, Serratia marcescens. Prodigiosin has a broad biological profile with activity against fungi, tumor cell lines and malaria. It was shown to be an immunosuppressant in 2007. The mode of action of prodigiosin has recently received considerable attention as an inducer of apoptosis in human primary cancer cells via caspase activation. Prodigiosin also acts as an inducer of p21WAF1/CIP1 expression via transforming growth factor-β receptor pathway, and of NAG-1 activation by acting on glycogen synthase kinase-3β.

References