PDF匡도

자 金 옹 撞 돔 虜 지 玖 곽 딘 空 돨 땡 제 欺 景 瀝

練닒屢、쟀날捺、蠟鬼甬、형힛를 嶠볶댕欺 츱옰欺欺牘

壇痰 줬든쓸밖뀁、칫똥DNA瘻盧첩썽돔돨錮南UTP쾇왯칫똥깃션세減(TUNEL)뵨직駕玖곽減桔씩됴优잤金옹撞돔훙흗裙갑玖곽溝(ZR-75-30)玖곽딘空,깻뚤페玖곽딘空돨땡제欺景瀝꿎땍、롸驕.써벎鞫刻:-5→、0→、4→잤金옹엇옵撞돔ZR-75-30玖곽딘空,뎃玖곽딘空쏵넋肝茄駱玖곽渡텯楠珂쇌;잤金옹优똑、珂쇌;玖곽잤金옹빈뿟릿텯楠珂쇌돨緞捲,侶硅緞捲凜羹야唐츠鞫돨땡제欺景瀝。쒔법뚤잤金옹撞돔ZR-75-30玖곽딘空돨땡제欺景瀝롸驕、궐싹,膽朞놔桔씩잤金옹撞돔虜지玖곽딘空돨茄駱竟溝:섦玖곽쒔37→渡텬楠36h∪잤金옹(-5→24h,0→36h,4→48h)∪玖곽잤金옹빈黨37→뿟릿텬楠18-24h∪玖곽딘空쇱꿎∪쇱꿎써벎履북롸驕。壇痰맡茄駱竟溝옯賈玖곽딘空쪽댐50-60%,할路릿昑 솅。膽뺏竟溝槨 흙桔씩잤竟옹撞돔玖곽딘空돨斤뵀눈뒵섟페롸綾샙齡瓊묩茄駱친謹。

KINETIC CHARACTERISTICS OF APOPTOSIS INDUCED BY COLD SHOCK IN HUMAN BREAST CANCER CELLS

Apoptosis induced by cold shock in human breast cancer cell (ZR-75-30) was identified with scanning electron microscope and in situ end-labelling (TUNEL) and the apoptotic kinetic characteristics was studied with flow cytometry. The results showed that the cells exposed to cold shock $(-5\rightarrow, 0\rightarrow, 4\rightarrow)$ exhibited characteristics of apoptosis, including nuclear condensation and fragmentation, microvilli disappearance, cell membrane blebbing and apoptotic bodies formation. All of these proved that cold shock can induce apoptosis in tumor cells.

The quantitative analysis of cold shock inducing apoptosis by flow cytometry revealed that apoptosis in ZR-75-30 cells is correlated with preculture time, cold shock temperature, duration and rewarming time, showing obvious kinetics charaeteristics. In addition, an experimental system for studying cold shock inducing apoptosis was selected: Preculture of cells at $37 \rightarrow$ for $36h \cup Cold$ shock of cells $(-5 \rightarrow$ for 24h, $0 \rightarrow$ for 36h, $4 \rightarrow$ for 48h) \cup Rewarming post-cold shock cells at $37 \rightarrow$ for $18-24h \cup Detecting$ apoptosis. It is an optimum experimental model to study signal transmisson and molecular mechanism of apoptosis induced by cold shock.

밑숩늦

잤金옹(Cold shock); 虜지玖곽딘空(Tumor cell apoptosis); 땡제欺景瀝(Kinetic characteristics); 茄駱친謹 (Experimental model)