¶¨Á¿µç×ÓÊøÏÔÎ¢·ÖÎöÖÐÉúÎïi±¡ÑùÆ·µÄÖÊÁ¿ËðÊ§

»ÆÒ«¡¢ÓáÕÃ¡¢·¨¾©¡¢ÓáÓÀ¸»¡¢ÁèÚ±Æ¼
¸´µ©´óÑ§Ò½Ñ§Ô°µç¾µÊÒ

　　¶Ô¶àÖÖÉúÎïi±¡ÑùÆ·°Í±êÑù½øÐÐµç×ÓÏ½ÕëXÉäÏßÄÜÆ×ÏÔÎ¢·ÖÁ¿·ÖÎö,·Ö±ðÒÔÕÛµç×ÓÊø°ºä»÷°ºÑùÆ·µÄO K¦Á·å¼ÆÊýºÍ½éÓÚ4.2-6.2 keVÇø¼äµÄÄÁ¬ÐøX-ÉäÏß¼ÆÊý±ä»¯¼à²âÔÊÁ¿ËðÊ§,½á¹ûÏÔÊ¾ÑùÆ·O K¦Á·å¼ÆÊý¼õÉÙ·ù¶È´óÓÚ¬ÐøX-ÉäÏß¼ÆÊý¼õÉÙ·ù¶È,ÔÚ¾ÙàÍ¬µÄ·ÖÎöÌõ¼þÏÂ,·ÑùÆ·ÖÊÁ¿ËðÊ§³Ì¶È²»ÏàÍ(P<0.05),ÅàÑø¸Î°©Ï¸°ûÀä¶³¸ÉÔï³¬±¡ÇÐÆ¬¡¢Ã÷½°Àä¶³¸ÉÔï³¬±¡ÇÐÆ¬¡¢BSA±¡Ä¤¡¢°±»ùËÜÁÏ³¬±¡ÇÐÆ¬¡¢ºûÀä¶³¸ÉÔï³¬±¡ÇÐÆ¬¬ÍÁÃÑ»Æ¸ßÁ×µ°° ×±¡Ä¤ÑùÆ·µÄÖÊÁ¿ËðÊ§·Ö±ðÎª33%¡¢28%¡¢26%¡¢18%¡¢13%ºÍ13%,ÒÒÉÏ½á¹á¹ûáÊ¾:ÒÒO K¦Á·å¼ÆÊýµÄ¼õÉÙ¼à²ââÑùÆ·µÄÖÊÁ¿ËðÊ§½ÏÃô¸Ð,ÔÚ½øÐÐÉúÎïi±¡ÊÑù¶¨Á¿EPMAÊ±Ó¦¶Ô,÷ÑùÆ·µÄÖÊÁ¿ËðÊ§½øÐÐÐÏàÓ¦Ð£Õý¡£

MASS LOSS OF QUANTITATIVE ELECTRON PROBE X RAY MICROANALYSIS FOR BIOLOGICAL THIN SPECIMEN

The O K¦Á peak counts and continuum counts within 4.2-6.2 keV were used to monitor the mass loss extent of thin biological ultra cryosections and standards during electron probe X ray microanalysis respectively, these results show that the O K¦Á peak counts declines more steeply than continuum counts(P<0.05). Under the same electron irradiation, not all the samples lose mass to the same extent(P<0.05). Cultured liver carcinoma cell dried cryosections, gelatin dried cryosections, BSA films, aminopastic thin sections, eryothrocyte cryosections and phosvitin films lose 33%,28%,26%,18%,13% and 13% respectively. These results suggest that (1) the O K¦Á peak counts decrease is more sensitive than continuum counts alteration, (2) the mass loss extent should be corrected during quantitative electron probe X ray microanalysis.

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µç¾¾µX-ÉäÏßÏÔÎ¢·ÖÁ¿·ÖÎö(Quantitative X-ray microanalysis); ÖÊÁ¿ËðÊ§(Mass lose); ±êÑù(Standards)