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ABOUT THE COVER

The expression of heat shock protein 25 (Hsp25) or Hsp27 in mouse and human breast cancer cells is effectively downregulated by Hsp25 short hairpin RNA (Hsp25shRNA) or Hsp27 small interfering RNA (Hsp27siRNA), respectively. The cover features phase-contrast (at left) and fluorescent (at right) micropictograms (40X magnification) of control 4T1 cells (a highly metastatic breast cancer cell line) expressing controlshRNA (top images) or 4T1 cells modified to express Hsp25shRNA (bottom images). As demonstrated by the phase-contrast images (left), cell morphology is unaffected by the permanent transduction of a vector which contains controlshRNA (which does not have any sequence homology with the mouse genome) or Hsp25shRNA (which has sequence homology with the mouse Hsp25 gene); the green fluorescent protein (GFP)-tagged fluorescent images (right) demonstrate a high expression (green) of controlshRNA and Hsp25shRNA even after six weeks in culture. Western blot analysis (not shown) indicates that Hsp25 expression is reduced in the Hsp25shRNA-expressing cells (bottom) versus controlshRNA-expressing cells (top). See article by Nagaraja et al. (beginning on page 122) for more information.