



**Figure S2. NM23-H1 is degraded via the lysosomal proteases, cathepsins L,B.** Cells were treated with lysosome inhibitors (ammonium chloride, 60mM; chloroquine, 100 $\mu$ M, E64D-cysteine protease inhibitor, 20 $\mu$ M) for 8h (a-c), or transfected with siRNAs (d,e). Lysates were blotted with antibodies, and bands quantitated with ImageQuant. Graphs shown are Mean $\pm$ SEM for 3 independent experiments normalized to vehicle- or scrambled-treated. \* $p$ <0.05, \*\* $p$ <0.01 using one-sample t-tests. (f) Recombinant active cathepsin L was incubated in the absence (top) or presence (bottom) of recombinant NM23-H1. The reaction was terminated with acetic acid, and analyzed by MALDI MS using the Chait thin-layer technique. Similar results were observed with cathepsin B (not shown). (M+2H)<sup>++</sup> or (M+3H)<sup>+++</sup> indicates multiple charging of the intact substrate. The NM23-H1 protein was completely cleaved in the reaction. Inset: Western blot showing input.