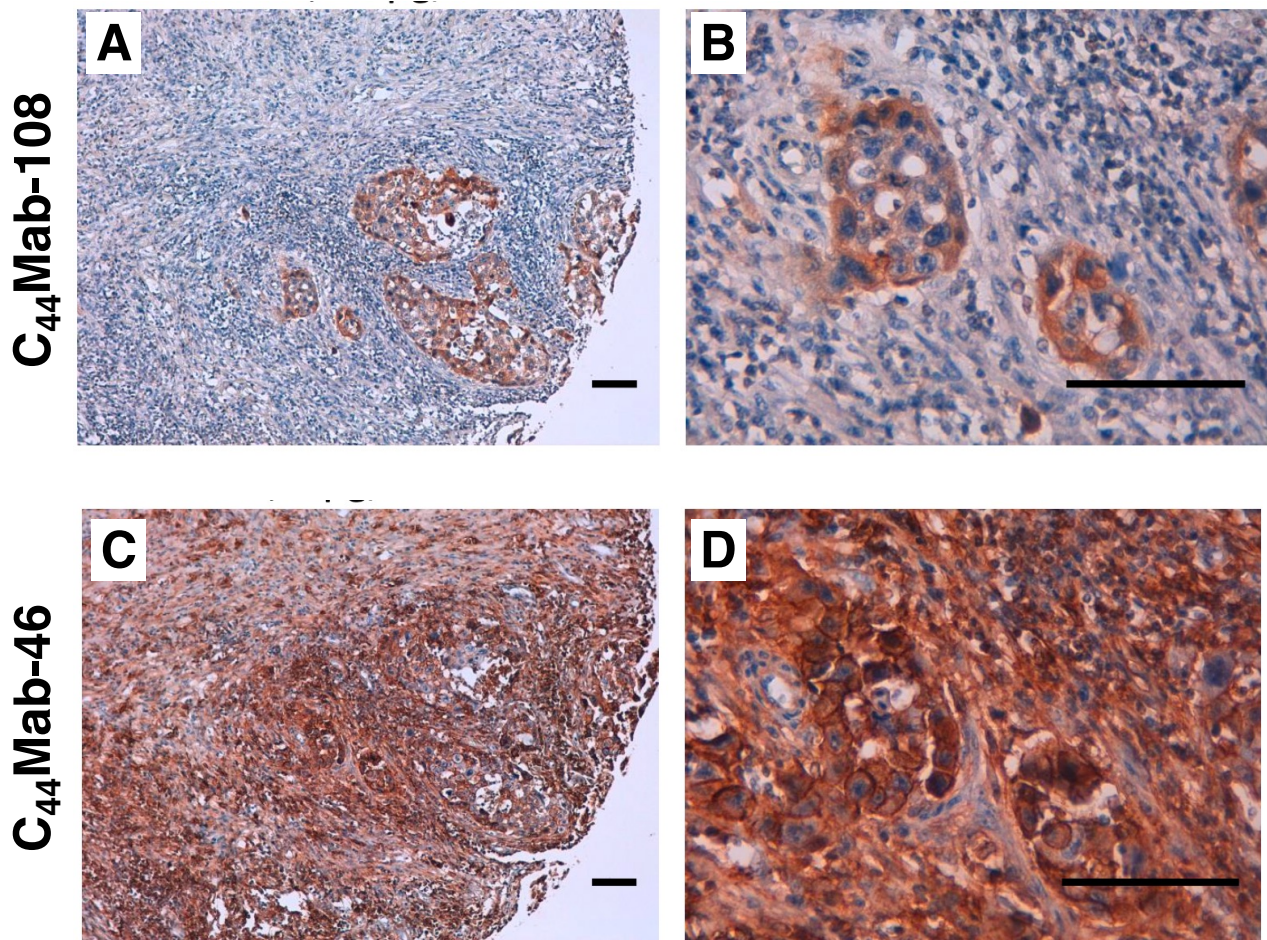



**Supplementary Figure S1 Conformation of C<sub>44</sub>Mab-108 epitope by ELISA using peptides which cover the CD44v3-10 extracellular domain.** Fifty-eight synthesized peptides [17] were immobilized on immunoplates. The plates were incubated with C<sub>44</sub>Mab-108 (1 µg/mL), followed by incubation with peroxidase-conjugated anti-mouse immunoglobulins. Optical density was measured at 655 nm. Values are presented as the mean ± SD. ELISA, enzyme-linked immunosorbent assay.



**Supplementary Figure S2 Immunohistochemical analysis using C<sub>44</sub>Mab-108 and C<sub>44</sub>Mab-46 against esophageal squamous cell carcinoma tissues.** After antigen retrieval, the esophageal tissue microarray (BC02011, US Biomax Inc.) were incubated with 10  $\mu\text{g}/\text{mL}$  of C<sub>44</sub>Mab-108 (A and B) and 1  $\mu\text{g}/\text{mL}$  of C<sub>44</sub>Mab-46 (C and D), followed by treatment with the Envision+ kit. The color was developed using 3,3'-diaminobenzidine tetrahydrochloride (DAB), and the sections were counterstained with hematoxylin. Scale bar = 100  $\mu\text{m}$ . As with OSCC (Fig. 4), C<sub>44</sub>Mab-108 stained stromal invaded tumors and could clearly distinguish tumor cells from stromal tissues (A and B). In contrast, C<sub>44</sub>Mab-46 stained the both (C and D).



<b>Human</b>	<b>DH</b> <b>TKQ</b> <b>NQ</b> <u><b>DWTQWN</b></u> <b>PSHSNP</b>
<b>Mouse</b>	<b>AR</b> <b>TE</b> <b>NQ</b> <u><b>DWTQWK</b></u> <b>PNHSNP</b>
<b>Rat</b>	<b>AH</b> <b>TKQ</b> <b>NQ</b> <b>ERT</b> <u><b>QWN</b></u> <b>PIHSNP</b>
<b>Cham</b>	<b>DH</b> <b>TKQ</b> <b>NQ</b> <b>DWI</b> <u><b>QWK</b></u> <b>PSHSNP</b>

**Supplementary Figure S3** An alignment of human, mouse, rat, and Chinese hamster (Cham) CD44 v4 sequences. In our preliminary epitope mapping analysis, alanine-substitution of each amino acid (allows) in human v4 region reduced the reactivity of C<sub>44</sub>Mab-108 (manuscript preparation). Since amino acid sequence of the region is identical between human and mouse (underlined), C<sub>44</sub>Mab-108 could recognize both human and mouse CD44v4.