

Figures 1-4 Validation of CD24 and CD44 antibodies and double immunostaining CD44/CD24, canine tonsils

Figure 1. CD24 staining of lymph follicles and epithelium (x10) **Figure 2**. CD24 staining of a lymph follicle (x20) **Figure 3**. CD44 staining on basal layer of the epithelium (x20) **Figure 4**. Double immunostaining of CD24/CD44 on the epithelium (x20)



Figure 5 Luminal cells with a CD44⁺/CD24⁻ phenotype. CD44 is localized only on the basolateral domain of the cells (x40) **Figure 6** Anaplastic cells with a CD44⁺/CD24^{low} phenotype (x40). **Figures 7-10** Examples of staining with a CD44⁺/CD24⁻ phenotype in the four major histological types. **Figure 7** Tubular simple carcinoma, luminal component (x20). **Figure 8.** Tubular complex carcinoma, myoepithelial component (x20). **Figure 9.** Solid carcinoma, diffuse component (x20) **Figure 10**. Anaplastic carcinoma, diffuse component (x20). **Figure 11** Embolus in an anaplastic tumor stained with a CD44⁺/CD24⁻ phenotype (x20). **Figure 12** Grade 3 solid carcinoma stained with a CD24⁺/CD44⁻ phenotype (x20). **Figure 13** Grade 2 solid carcinoma stained with a CD44⁺/CD24⁺ phenotype (x20).



Figure 14 Kaplan-Meier overall survival curves of group with expression or absence of (a) CD44 (b) CD24, (c) CD44⁺/CD24⁻, (d) CD44⁺/CD24^{-/low}, (e) CD44⁻/CD24⁺, (f) CD44⁺/CD24⁺

Supplementary data



Figures 15-18. Aspecific stainings of CD44

Figure 15. Aspecific CD44 cytoplasmic staining of a neoplastic cell affected with major karyomegaly. (x40) **Figure 16**. Aspecific staining of CD44 forming a ring around the infiltrated tumor cells in an anaplastic carcinoma. (x20) The phenomenon is most likely linked to necrosis. **Figure 17**. Massive aspecific CD44 staining affecting the stroma of an anaplastic carcinoma highly infiltrated with neoplastic cells and most likely associated to necrosis (x20). **Figure 18**. Aspecific staining of plasmocytes on a mammary carcinoma (x20).

Supplementary data



Figures 19 – 22 Aspecific stainings and observations on CD24

Figure 19. Aspecific staining of CD24 on the apical membrane of luminal tumor cells (x20) **Figure 20** Emboli showing an intense CD24 staining. On some of them, a CD24 apical layer is visible (x20). **Figure 21** CD44⁺CD24⁺ staining in cells with massive karyomegaly and increase in cell size (x40). **Figure 22** CD44⁺CD24⁺ staining in cells presenting no major changes in nuclei (x40)