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(54) Title: ANTI-LATENT TGF-BETA 1 ANTIBODIES AND METHODS OF USE

(57) Abstract: An objective of the invention is to provide anti-latent TGF-beta 1 antibodies and methods of using such antibodies. The present invention provides anti-latent TGF-beta 1 antibodies which inhibit a protease mediated activation of latent TGF-beta 1 without inhibiting integrin mediated activation of latent TGF-beta 1 or with partially inhibiting integrin mediated activation of latent TGF-beta 1, or which inhibit a protease mediated activation of latent TGF-beta 1 but have less impact on inhibiting integrin mediated activation of latent TGF-beta 1. The invention also provides optimized anti-latent TGF-beta 1 antibodies in which pH-dependent binding property is improved. The anti-latent TGF-beta 1 antibodies may be used for treating fibrosis or cancer. For example, renal fibrosis, liver fibrosis, and lung fibrosis may be treated using the anti-latent TGF-beta 1 antibodies.

