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(54) Title: INTEGRIN ALPHA10 ANTIBODY

(57) Abstract: The present invention relates to a novel integrin alpha10 antibody, as well as uses thereof in medicine. 25 humanized antibodies (abs) derived from the known mouse mAb365 (the hybridoma deposited under the accession number DSM ACC2583) are disclosed. The ones which bind specifically the integrin alpha 10 beta 1 were selected. Out of the 25 humanized variants 5 were selected as lead candidates (designated TAR-Ab8, TAR-Ab9, TAR-Ab13, TAR-Ab14 and TAR-Ab23) since these 5 entire antibodies were shown to have improved thermal stability as compared to the chimeric antibody designated TAR-Ab0. There is further functional characterization only of TAR-Ab23 which has higher binding affinity than mAb365.



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