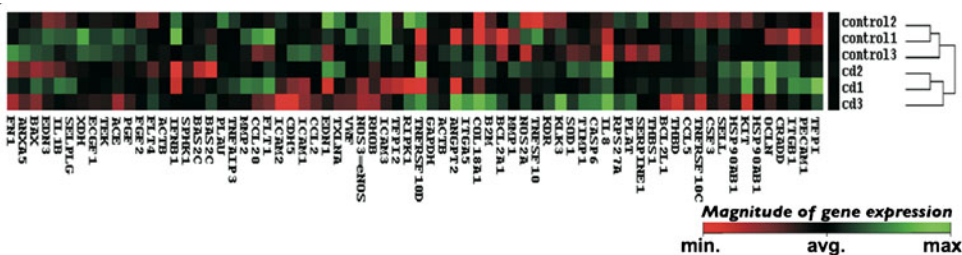


**Figure 01. Effects of celiac autoantibodies on *in vivo* vasculature aim 1.A.** Representative pictures of mouse matrigel implants treated with CD Mab or non-CD Mab. After eight days the implants were removed and stained for blood vessels with von Willebrand factor (vWF)-antibody (green) and blue color indicates nuclei (DAPI). Scale bar represents 200  $\mu$ m. Bars show vascular parameters measured from matrigel implants. (n=8 animals per group). Bars in charts represent the average value as percentage + SEM. All data was normalized to the basal group (dotted line). \* represents  $P \leq 0.001$  statistical difference.

Gene	Symbol	Expression
Angiopoietin 2	ANGPT2	0.78
Angiotensin 1 converting enz.	ACE	1.25
BCL2-related protein A1	BLC2A1	0.52
Fibronectin 1	FN1	1.20
Integrin, beta 1	ITGB1	0.73
Interleukin 8	IL8	0.60
Nitric oxide synthase 2A	NOSA	0.65
Ras homolog gene family member B	RHOB	1.26
Selectin L	SELL	0.77
Xantine dehydrogenase	XDH	1.25

**Figure 02. Microarray analysis of genes related to angiogenesis in endothelial cells treated with/without autoantibodies derived from celiac disease patients.** A list of genes, which, after data analysis, showed consistent changes in their expression level between cells treated with CD IgA and control IgA. Numbers are mean values of expression ratios from three separate experiments after treatment with individual CD IgA when compared to controls.



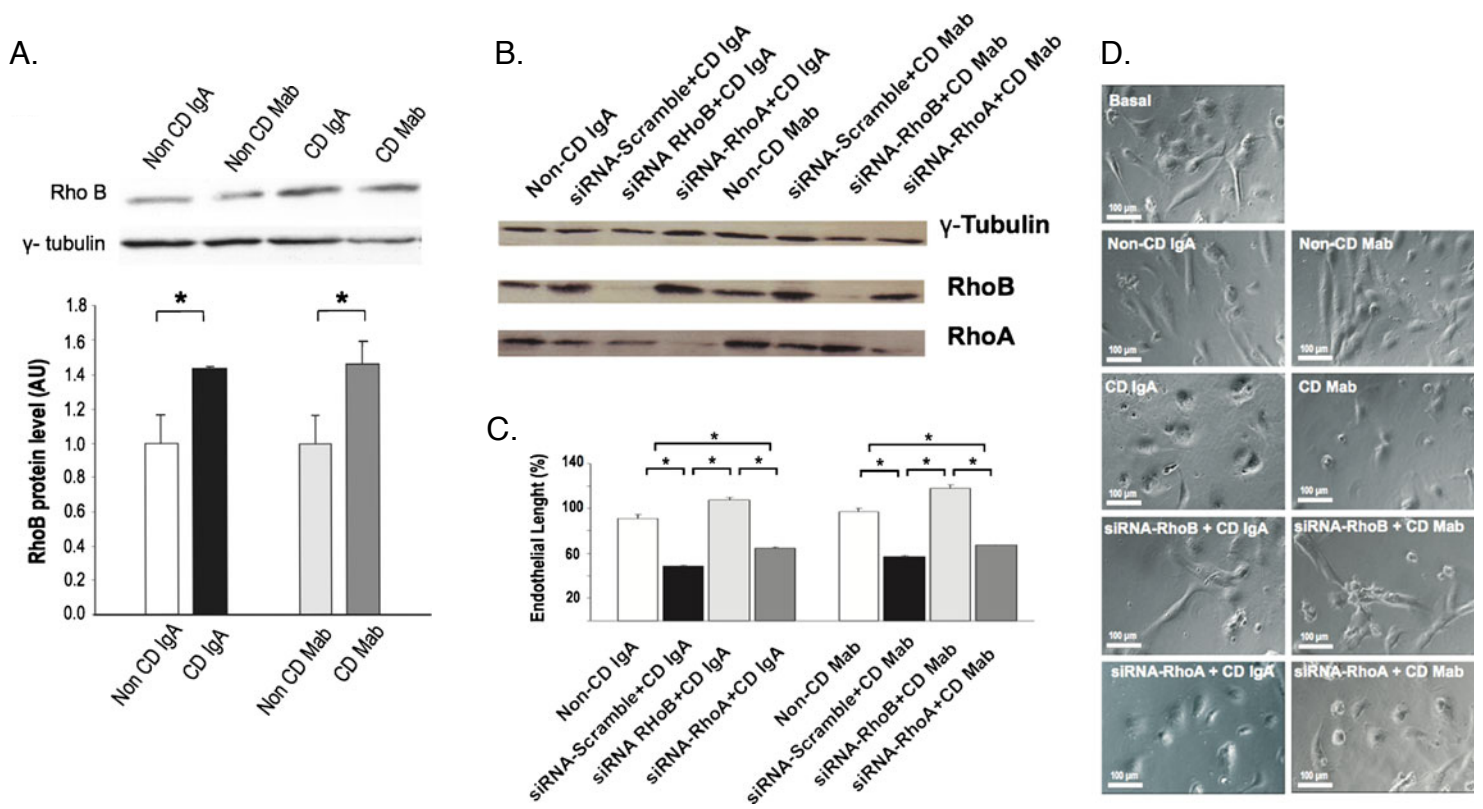


Figure 3. **RhoB expression is up regulated after the treatment with antibodies against transglutaminase 2.** A. expression of RhoB after addition of antibodies in cultures of endothelial cells. B, C and D. The silencing of the protein rescued the vascular formation even when antibodies are present.