Supplementary material

Supplementary Table 1 Diagnostic performance of antibodies against CHI3L1.

		Anti-CHI3L1					
		IgG		**IgA**		**sIgA**	
		%	95% CI	%	95% CI	%	95% CI
CD vs. HCONT	SENS	8.2	5.1-12.2	29.2	23.7-35.2	39.3	33.3-45.6
	SPEC	97.7	91.9-99.7	97.7	91.9-99.7	95.4	88.5-98.7
	PPV	91.3	72.0-98.9	97.4	90.9-99.7	96.2	90.5-99.0
	NPV	26.3	21.5-31.4	31.6	26.0-37.5	34.5	28.4-40.9
CD vs. UC	SENS	8.2	5.1-12.2	29.2	23.7-35.2	39.3	33.3-45.6
	SPEC	98.3	95.2-99.7	88.9	83.4-93.1	67.2	59.9-74.0
	PPV	87.5	67.6-97.3	79.0	69.4-86.6	63.1	55.2-70.6
	NPV	42.9	38.0-47.8	46.8	41.4-52.2	43.7	37.8-49.8

Ig: Immunoglobulin; sIgA: secretory IgA; aCHI3L1: anti-chitinase 3-like 1 autoantibodies; CD: Crohn's disease; UC: ulcerative colitis; HCONT: healthy controls; SENS: sensitivity; SPEC: specificity; PPV: positive predictive value; NPV: negative predictive value; CI: confidence interval.

Supplementary Table 2 Association of aCHI3L1 antibody formation with disease duration, clinical and endoscopic activity of Crohn's disease at sample procurement

			Anti-CHI3L1					
			IgG pos. (%)	[a]p	IgA pos. (%)	[a]p	sIgA pos. (%)	[a]p
Clinically in remission	HBI	≤4	9.7	0.205	29.2	1.000	38.9	0.887
Clinically active disease		5≤	4.2		29.2		40.3	
Endoscopic inactivity	SES-CD	≤2	9.8	1.000	26.8	0.809	39.0	1.000
Endoscopic activity		3≤	7.3		31.7		41.5	
Disease duration at sampling	Q1	0-1 yrs	9.8	0.391	31.4	0.868	47.1	0.711
	Q2	1-4 yrs	9.6		26.5		37.3	
	Q3	4-9 yrs	3.2		30.2		39.7	
	Q4	9 yrs<	10.9		32.7		38.2	

[a]Using χ2-test with Yates correction.

HBI: Harvey–Bradshaw Index; SES-CD: Simple Endoscopic Score for Crohn's Disease; Q: Quartile; p: p-value – level of significance; Ig: Immunoglobulin; sIgA: secretory IgA; aCHI3L1: anti-chitinase 3-like 1 autoantibodies.

Supplementary Table 3 Spearman correlation of aCHI3L1 levels with clinical and endoscopy activity indices in CD patients

| | aCHI3L1 | | | |
| | IgA | | sIgA | |
	Spearman r	p- value	Spearman r	p- value
CDAI	0.021	0.789	0.014	0.863
HBI	-0.062	0.415	-0.096	0.208
SES-CD	-0.031	0.781	-0.034	0.758

Non-parametric Spearman rank correlation analysis was used. The column corresponding to aCHI3L1 IgG was omitted because of the low prevalence of antibody positivity in the CD cohort.

HBI: Harvey–Bradshaw Index; CDAI: Crohn's Disease Activity Index; CD: Crohn's Disease; SES-CD: Simple Endoscopic Score for Crohn's Disease; Ig: Immunoglobulin; sIgA: secretory IgA; aCHI3L1: anti-chitinase 3-like 1 autoantibodies.