

## Launch of a New Kit for the Detection of anti-Integrin $\alpha\beta6$ Antibodies.

-For understanding pathology of inflammatory bowel disease (IBD)-

Product information → <https://www.mblbio.com/bio/g/dtl/P/?pcd=5288>

Purchase order → <https://www.mblbio.com/e/inq/ivd.html>

Tokyo, Japan - April 4, 2022 - Medical & Biological Laboratories Co., Ltd. (President: Kimimasa Yamada), a JSR Life Sciences Company, will release a new kit for measuring anti-integrin  $\alpha\beta6$  antibodies for research use. The product was successfully developed in collaboration with Dr. Shiokawa, M., Kyoto University Graduate School of Medicine, under the support of the Japan Agency for Medical Research and Development (AMED). It is scheduled to be released worldwide on April 4th, 2022.

The number of patients with ulcerative colitis (UC) has been growing not only in Japan but worldwide. UC is a chronic inflammatory bowel disease and the underlying mechanism remains unclear. There are no specific biomarkers, and its diagnosis is determined comprehensively from clinical symptoms and tests such as endoscopy.

Anti-integrin  $\alpha\beta6$  antibodies are detected in about 90% of UC patients, and the results of basic research suggest that these autoantibodies themselves may be causing the disease.

The anti-integrin  $\alpha\beta6$  antibody is an autoantibody against integrin  $\alpha\beta6$ . Integrin is a cell-surface receptor that is responsible for cell adhesion by binding to extracellular matrix. In mammals, there are 24 different types of integrin. Integrin  $\alpha\beta6$  expressed in the intestinal epithelium is associated with suppression of inflammation and prevention of infection by pathogens and parasites.

Anti-integrin  $\alpha\beta6$  antibody is frequently detected in UC patients, and its antibody titer has been reported to be correlated with disease activity\*1.

The kit can be used in any laboratories which have absorbance microplate readers. Looking forward, this type of antibody testing could be used in diagnostic or therapeutic procedures, and it is expected that medical treatment can be readily provided without a specialist.

	UC	CD	Other enteropathy	CTD	HC
<b>Positive rate</b>	92.0% (103/112)	7.0% (5/71)	2.9% (1/35)	7.4% (2/27)	0.0% (0/22)

UC: ulcerative colitis, CD: Crohn's disease, CTD: connective tissue disease, HC: healthy control

**【table 1】 positive rate of each disease**

Reference:

※1 Kuwada, T., et al. (2021). "Identification of an Anti-Integrin  $\alpha\beta6$  Autoantibody in Patients With Ulcerative Colitis." *Gastroenterology* 160(7): 2383-2394.e2321.

**Product information:**

[Research use only]

Product name: Anti-Integrin  $\alpha\beta6$  ELISA Kit

Code No.: 5288

Price (tax not included): 530,000 JPY

Package: 96 wells

Store: 2-8°C

Shelf life: 6 months

\*This assay kit is for research use only and not for use in diagnostic or therapeutic procedures.

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**About Medical & Biological Laboratories Co., Ltd.:**

Medical & Biological Laboratories (MBL) was established in 1969 as the first antibody manufacturer in Japan, and researches, develops, manufactures, and sells reagents of in vitro diagnostics (IVD) and reagents for basic research. It has now expanded its business not only to the immunological field but also to the field of genetic diagnosis.

In the IVD business, we develop and sell IVD reagents for autoimmune diseases, cancer, infectious diseases, etc. Particularly in the field of autoantibody diagnosis, we are expanding our product lineup as a top manufacturer in Japan and contributing to medical care in this field where there are many intractable diseases. In the field of oncology, we are contributing to personalized medicine by developing companion diagnostics that predict the effects of drugs.