Researchers at the Sahlgrenska Academy, at the University of Gothenburg, Sweden, have discovered a way of confirming the disorder using stool samples.

Credit: Photo: University of Gothenburg

Irritable bowel syndrome (IBS) is hard to diagnose as well as treat, but researchers at the Sahlgrenska Academy, at the University of Gothenburg, Sweden, have discovered a way of confirming the disorder using stool samples.

Irritable bowel syndrome (IBS) causes chronic or recurring problems with pain and discomfort in the abdomen together with changes in bowel habits. The syndrome is common and is believed to be linked to dysfunction of the stomach and intestines, but our understanding of IBS is incomplete, making it difficult to diagnose and treat.

Researchers at the Sahlgrenska Academy have now identified specific proteins that can be used to identify patients with IBS: "The proteins we've been investigating, granins, are found in various forms with different functions in the nervous, immune and digestive systems," explains researcher Lena Öhman. "Our studies show that IBS patients have higher levels of some granins and lower levels of others in their faeces."

Further studies are needed, but if granins can be used to diagnose IBS, it is hoped that this will contribute to the development of new treatments. The study, which compared 82 IBS patients with 29 healthy subjects, was published in the American Journal of Gastroenterology.

Granins (chromogranin A) have previously been shown to serve as biomarkers for other inflammatory diseases in the gut, such as ulcerous colitis and Crohn's disease. The present study looked at the variants secretogranin II and chromogranin B and found that IBS patients have high levels of the former and low levels of the latter.

IBS affects an estimated 10-20% of the population and causes chronic or recurring problems with pain and/or discomfort in the abdomen, together with changes in bowel habits. The causes are largely unknown, but disturbances of the gut flora and a change in the pattern of the gut's immune defence have been mooted as possible factors behind the symptoms. There is currently no cure for IBS, but in many cases the symptoms can be alleviated.