Easy and accurate quantitative determination of fecal calprotectin, for the laboratory diagnosis of chronic inflammatory bowel diseases
Calprotectin protein is found in significant quantities within the cytoplasmic granules of neutrophil leukocytes, of which it constitutes 5% of the total proteins and 60% of the total content of the granules. This protein has bacteriostatic and fungistatic activity: for this reason plenty of Calprotectin in neutrophils and its antimicrobial activity suggest an important role in the defensive functions of the organism. Since the inflammatory processes of the organism are accompanied, generally, by an accumulation of neutrophil leukocytes in inflamed tissues, this protein is used as an indirect marker of inflammation. The levels of Calprotectin reflect the inflammatory status of the specific district in which it is measured; in particular the dosage of fecal Calprotectin is a parameter for assessing the presence of an inflammatory process of the intestinal mucosa: for its high presence in the feces in the course of an inflammatory bowel disease; for its particular resistance to the attack of proteolytic enzymes, present in feces, due to its link with calcium, which gives it great stability (one week at 4 °C). Recent studies confirmed that the research of fecal Calprotectin in patients with symptoms such as diarrhea, abdominal pain, meteorism, alternation of diarrhea and constipation, represents a valuable support for the differential diagnosis between the irritable bowel syndrome (values of fecal calprotectin within the standard) and those diseases such as inflammatory bowel disease: ulcerative colitis and Crohn’s disease, conditions in which the values of fecal calprotectin rise very significantly. The new Chorus Calprotectin kit allows accurate quantitative determination of fecal Calprotectin, thanks to its special system for the collection and transport of the sample (Coprocollect) which allows to take a preset quantity of feces. Its single determination size and convenient packaging (12 tests), make the kit Chorus Calprotectin a valid and economic diagnostic device for inflammatory bowel diseases.