Medix Biochemica has over 30 years of experience in producing premium-quality monoclonal antibodies and recombinant antigens. The company’s extensive product selection is manufactured using optimized, serum and protein free, industrial-scale in vitro production methods. Fully characterized and purified antibodies ensure optimal batch-to-batch consistency. Combined with flexibility and expert customer service, these qualities have made Medix Biochemica one of the most important antibody suppliers for the IVD community.

FIGURE 4. Medix Biochemica’s PCT antibodies are suitable for sandwich FIA detection of PCT in patient samples. Patient samples of varying PCT concentrations were analyzed using different combinations of Medix Biochemica’s monoclonal antibodies. The combinations of clones 4006 (capture) and 4005 (detection), 4004 (capture) and 4006 (detection), as well as 4005 (capture) and 4003 (detection) resulted in the highest PCT detection sensitivity. Please note that the results presented here were obtained in standard FIA conditions that were not specifically optimized for any of the antibody pairs.

Medix Biochemica’s monoclonal antibodies and recombinant antigens — Validated and reliable.

References:
Procalcitonin (PCT) is the 116 amino-acid precursor of the peptide hormone calcitonin. In healthy individuals, PCT is produced by the thyroid gland and upon production, cleaved into three peptides: calcitonin, katacalcin, and an N-terminal fragment.

The baseline serum levels of intact PCT are low; however, they rise rapidly in response to systemic bacterial infections. In clinical diagnostics, PCT is utilized as an early and highly accurate biomarker for sepsis and bacterial inflammation. PCT testing has also proved to be useful in guiding and monitoring antibiotic treatment, as well as in distinguishing between bacterial and non-bacterial infections.

Medix Biochemica provides six high-quality monoclonal IgG antibodies with varying binding specificities for the reliable detection of PCT in blood or plasma samples (Table 1). Furthermore, a recombinant PCT antigen is available.

Well-characterized detection of different PCT epitopes

The anti-human PCT monoclonal antibodies have been designed to bind to different domains of the PCT protein (Figure 1). The pairing properties of MedixMAB PCT antibodies have proven suitable for clinical sandwich FIA applications. For optimized PCT detection in patient samples, the following antibody pairs are recommended:

- Clone 4006 (capture) and 4005 (detection)
- Clone 4004 (capture) and 4006 (detection)
- Clone 4005 (capture) and 4003 (detection)

The anti-human PCT monoclonal antibodies have been designed to bind to different domains of the PCT protein (Figure 1).

The recombinant PCT antigen is available.

Medix Biochemica provides six high-quality monoclonal IgG antibodies with varying binding specificities for the reliable detection of PCT in blood or plasma samples (Table 1). Furthermore, a recombinant PCT antigen is available.

Monoclonal antibodies for early and reliable detection of systemic bacterial infections and sepsis

TABLE 1. Medix Biochemica’s product portfolio includes 6 different mouse monoclonal antibodies* against human PCT and a recombinant PCT antigen.

TABLE 2. Pair recommendations for the anti-human PCT mouse monoclonal antibodies. The PCT antibodies were tested using human recombinant PCT antigen (Randox Life Sciences Cat. No. RCP9065).

FIGURE 1. The binding epitopes of the MedixMAB PCT antibodies.

The anti-human PCT monoclonal antibodies have been designed to bind to different domains of the PCT protein (Figure 1).

The anti-human PCT monoclonal antibodies have been designed to bind to different domains of the PCT protein (Figure 1).