

— BIOPHEN™ CS-SERIES · SYNTHETIC CHROMOGENIC PEPTIDE SUBSTRATES

A validated equivalent for *every Chromogenix S-substrate.*

The BIOPHEN™ CS-series covers the major coagulation and fibrinolytic serine proteases — **thrombin, Factor Xa, Protein C, plasmin, urokinase, tPA** — each built on the **same peptide sequence** as the corresponding Chromogenix S-series substrate and backed by HYPHEN BioMed's own **head-to-head equivalence studies**. All release para-nitroaniline (pNA), read at 405 nm; supplied lyophilized in **single-vial (1×25 mg) and bulk (12×25 mg)** formats.

CROSS-REFERENCE — BIOPHEN CS TO CHROMOGENIX S

BIOPHEN CS	TARGET PROTEASE	CHROMOGENIX	ANIARA REF
CS-01(38)	Thrombin (Factor IIa)	S-2238	A229001 · A229001C
CS-11(32)	Factor Xa — reference for anti-Xa heparin & DOAC assays	S-2732	A229011
CS-11(65)	Factor Xa — alternative, high-specificity	S-2765	A229014 · A229014C
CS-21(66)	Protein C / activated Protein C	S-2366	A229021
CS-41(03)	Plasmin / Plasminogen-SK	S-2403	A229041
CS-61(44)	Urokinase (uPA)	S-2444	A229061
CS-05(88)	tPA & broad-spectrum serine proteases	S-2288	A229091

Range also covers kallikrein and related serine proteases. CS-01(38) reactivity: thrombin 100%, kallikrein 60%, aPC 40%, FXa 5%, plasmin 5% — assay conditions establish protease specificity.

DOCUMENTED EQUIVALENCE — NOT JUST A CLAIM

HYPHEN BioMed has run **head-to-head characterization studies** of the CS-series against the matching Chromogenix substrates — CS-01(38) vs S-2238, CS-21(66) vs S-2366, CS-41(03) vs S-2403, CS-61(44), and an all-substrates evaluation. The data sheets are on the Aniara Resources page.

SAME CHEMISTRY

Identical peptide sequences and pNA-at-405 nm readout — drop into existing protocols without re-design.

A RELIABLE SECOND SOURCE

Continuity of supply for labs and manufacturers built around the legacy Chromogenix S-series.

RESEARCH TO BULK

Single 25 mg vials for development, 12-vial packs for routine and production-scale use.

EQUIVALENCE DATA HYPHEN BioMed comparison studies (M. Peyrafitte, 2009) — CS-21(66) vs Chromogenix S-2366 (aPC), CS-41(03) vs S-2403 (plasmin/plasminogen-SK), CS-61(44) (urokinase), CS-01(38) vs S-2238 (thrombin), and "Evaluation of chromogenic substrates: HYPHEN BioMed vs Chromogenix — all substrates." Available on the Aniara Resources / HYPHEN literature page.

Regulatory & availability: BIOPHEN™ CS-series substrates are synthetic, research-grade reagents **For Research Use Only — not for use in diagnostic procedures**. They are intended as a source of chromogenic substrate for the respective protease; the user establishes and validates assay conditions and specificity. Distributed by Aniara Diagnostica across **North America, the Nordic and the Baltic regions**. "Chromogenix" and S-series designations are referenced for cross-identification only and remain the marks of their respective owner. Single-vial and bulk formats; pricing on request. © 2026 Aniara Diagnostica, Inc.