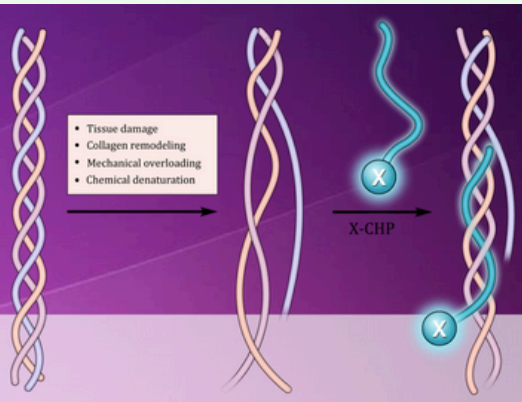
3Helix

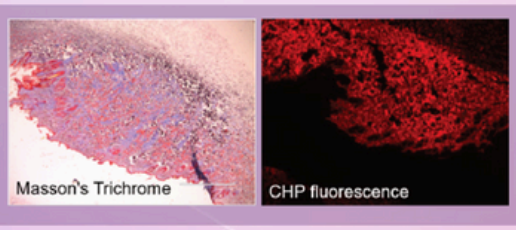
Empowering collagen targeting for the diagnosis and treatment of human conditions



What are CHPs?

CHPs are unique collagen-targeting peptides that only bind to denatured collagen. Species and collagen sub-type do not matter, nor does the mechanism of collagen damage; heat, enzymatic cleavage, mechanical force, or chemical processes. This is due to CHPs unique ability to recognize the individual alpha strand Polyproline Type II helix.

3Helix's Collagen Hybridizing Peptide is a synthetic peptide that can specifically bind to denatured collagen through hydrogen bonding. The CHP staining agent enables ***accurate and reliable molecular-level measurement of collagen contents*** in histology samples with ease to quantify the results through automated image analysis.



Unlike traditional collagen stains (e.g., Masson's Trichrome), whose results are not easy to quantify and assess, the fluorescence signals from CHP stains can be easily quantified, using basic image analysis tools such as Image-J or FIJI.

Use in Histology

- **Superb affinity and signal intensity that is visible to the naked eye**
- **Unparalleled specificity to damaged collagen with essentially no nonspecific binding to other proteins**
- **Applicable to all types of collagen from all species, relying on collagen's secondary structure instead of any defined sequence or epitope for binding**
- **A non-antibody approach with no species restrictions**
- **Small size (2% of IgG by MW) enabling facile tissue penetration and whole specimen staining without sectioning**

CHPs compared to common collagen stains

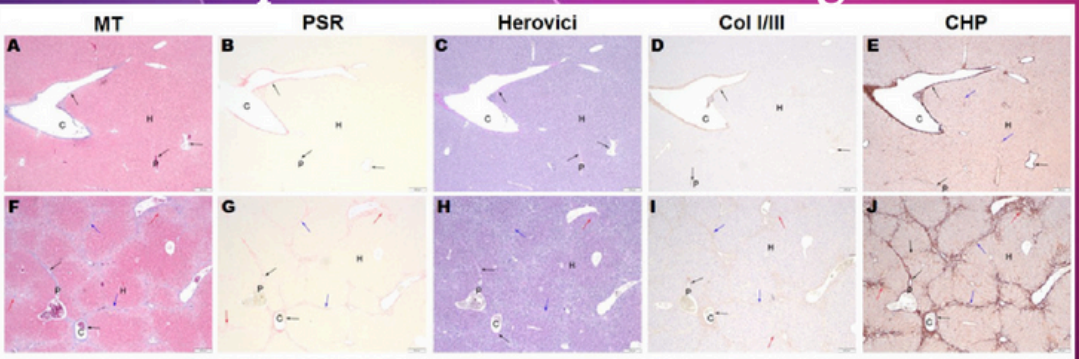


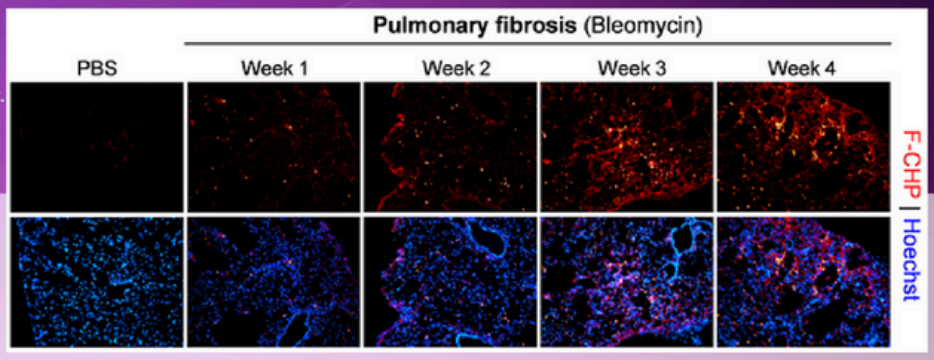
Figure 1. Representative photomicrographs of mouse livers. This figure shows serial sections taken from a healthy (control) mouse liver on the top **(A-E)** and the bottom row shows a fibrotic mouse liver 8 weeks after injection with CCl_4 **(F-J)**. Collagen, identified by arrows in all photos, is stained blue in MT, pink/red in PSR, pink/read for mature collagen and blue for young collagen in Herovici's, dark to light brown for Col I/III cocktail, and dark brown in CHP staining. C-central vein, H-hepatocytes, P-portal triads, Arrows-collagen staining. Magnification was 40X, scale bar = 200 µM.

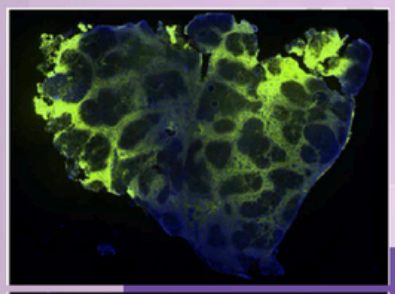
Distributed by:

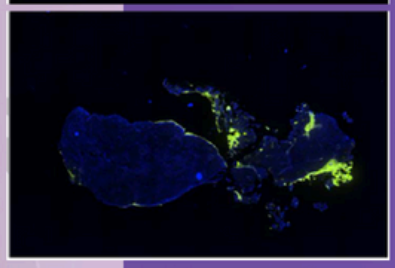
CliniSciences Group

CHPs visualize Fibrosis

Pulmonary fibrosis. Representative fluorescence micrographs of the subpleural areas of lung cryosections obtained from mice dosed with bleomycin through minipumps for varying time periods versus control mice dosed with PBS for 1 week, and stained with F-CHP and Hoechst 33342. Highly localized, bright F-CHP signals revealed spotty distribution of damaged collagen appearing as early as one week after bleomycin treatment. The overall CHP signals increased as the disease progressed from week 1 to week 3 and persisted through week 4.







- CHPs can detect damaged/denatured collagen with high specificity
- CHPs can detect all collagen subtypes regardless of mechanism of damage (thermal, mechanical, enzymatic, etc.)
- CHPs have been successful in staining fibrotic conditions in different tissue types (Kidney, Lung, Liver)
- CHPs are the only probe that give information about the collagen damage, but can still show total collagen like other stains (MT, PSR, etc.)

Histology Products	SKU	Size
F-CHP Collagen Hybridizing Peptide, 5-FAM Conjugate	FLU60, FLU300	60µg, 300µg
B-CHP Collagen Hybridizing Peptide, Biotin Conjugate	BIO60, BIO300	60µg, 300µg
R-CHP Collagen Hybridizing Peptide, Cy3 Conjugate	RED60, RED300	60µg, 300µg
Auto- CHP CHPs Optimized for Auto-Stainers**		**Contact Us for More Information

Distributed by:

CliniSciences Group

CliniSciences Group

Austria
Company: CliniSciences GmbH
Address: Sternwartestrasse 76, A-1180 Wien - Austria
Telephone: +43 720 115 580
Fax: +43 720 115 577
Email: oesterreich@clinisciences.com
Web: https://www.clinisciences.com

Belgium
Company: CliniSciences S.R.L
Address: Avenue Stalingrad 52, 1000 Brussels - Belgium
Telephone: +32 2 31 50 800
Fax: +32 2 31 50 801
Email: belgium@clinisciences.com
Web: https://www.clinisciences.com

Denmark
Company: CliniSciences ApS
Address: Oesterbrogade 226, st. 1, Copenhagen, 2100 - Denmark
Telephone: +45 89 888 349
Fax: +45 89 884 064
Email: danmark@clinisciences.com
Web: https://www.clinisciences.com

Finland
Company: CliniSciences ApS
Address: Oesterbrogade 226, st. 1, Copenhagen, 2100 - Denmark
Telephone: +45 89 888 349
Fax: +45 89 884 064
Email: suomi@clinisciences.com
Web: https://www.clinisciences.com

France
Company: CliniSciences S.A.S
Address: 74 Rue des Suisses, 92000 Nanterre- France
Telephone: +33 9 77 40 09 09
Fax: +33 9 77 40 10 11
Email: info@clinisciences.com
Web: https://www.clinisciences.com

Germany
Company: Biotrend Chemikalien GmbH
Address: Wilhelm-Mauser-Str. 41-43, 50827 Köln - Germany
Telephone: +49 221 9498 320
Fax: +49 221 9498 325
Email: info@biotrend.com
Web: https://www.biotrend.com

Iceland
Company: CliniSciences ApS
Address: Oesterbrogade 226, st. 1, Copenhagen, 2100 - Denmark
Telephone: +45 89 888 349
Fax: +45 89 884 064
Email: island@clinisciences.com
Web: https://www.clinisciences.com

Ireland
Company: CliniSciences Limited
Address: Ground Floor, 71 lower Baggot street Dublin D02 P593 - Ireland
Telephone: +353 1 6971 146
Fax: +353 1 6971 147
Email: ireland@clinisciences.com
Web: https://www.clinisciences.com

Italy
Company: CliniSciences S.r.l
Address: Via Maremmana inferiore 378 Roma 00012 Guidonia Montecelio - Italy
Telephone: +39 06 94 80 56 71
Fax: +39 06 94 80 00 21
Email: italia@clinisciences.com
Web: https://www.clinisciences.com

Netherlands
Company: CliniSciences B.V.
Address: Kraijenhoffstraat 137A, 1018RG Amsterdam, - Netherlands
Telephone: +31 85 2082 351
Fax: +31 85 2082 353
Email: nederland@clinisciences.com
Web: https://www.clinisciences.com

Norway
Company: CliniSciences AS
Address: c/o MerVerdi Munkerudtunet 10 1164 Oslo - Norway
Telephone: +47 21 988 882
Email: norge@clinisciences.com
Web: https://www.clinisciences.com

Poland
Company: CliniSciences sp.Z.o.o.
Address: ul. Rotmistrza Witolda Pileckiego 67 lok. 200 - 02-781 Warszawa -Poland
Telephone: +48 22 307 0535
Fax: +48 22 307 0532
Email: polska@clinisciences.com
Web: https://www.clinisciences.com

Portugal
Company: Quimigen Unipessoal LDA
Address: Rua Almada Negreiros, Lote 5, Loja 14, 2615-275 Alverca Do Ribatejo - Portugal
Telephone: +351 30 8808 050
Fax: +351 30 8808 052
Email: info@quimigen.com
Web: https://www.quimigen.pt

Spain
Company: CliniSciences Lab Solutions
Address: C/ Hermanos del Moral 13 (Bajo E), 28019, Madrid - Spain
Telephone: +34 916 750 700
Fax: +34 91 269 40 74
Email: espana@clinisciences.com
Web: https://www.clinisciences.com

Sweden
Company: CliniSciences ApS
Address: Oesterbrogade 226, st. 1, Copenhagen, 2100 - Denmark
Telephone: +45 89 888 349
Fax: +45 89 884 064
Email: sverige@clinisciences.com
Web: https://www.clinisciences.com

Switzerland
Company: CliniSciences AG
Address: Fracht Ost Flughafen Kloten CH-8058 Zürich - Switzerland
Telephone: +41 (044) 805 76 81
Fax: +41 (044) 805 76 75
Email: switzerland@clinisciences.com
Web: https://www.clinisciences.com

UK
Company: CliniSciences Limited
Address: 11 Progress Business center, Whittle Parkway, SL1 6DQ Slough- United Kingdom
Telephone: +44 (0)1753 866 511
or +44 (0) 330 684 0982
Fax: +44 (0)1753 208 899
Email: uk@clinisciences.com
IWeb: https://www.clinisciences.com

USA
Company: CliniSciences LLC
Address: c/o Carr Riggs Ingram, 500 Grand Boulevard, Suite 210 Miramar Beach, FL 32550- USA
Telephone: +1 850 650 7790
Fax: +1 850 650 4383
Email: usa@clinisciences.com
Web: https://www.clinisciences.com

Version 20-06-2025