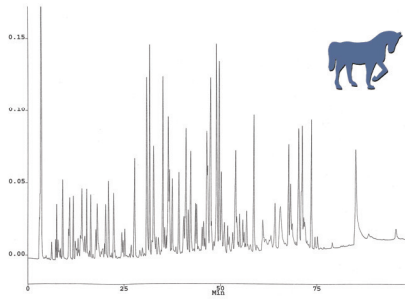
HAISIL 100 *The Workhorse*

Phases	Silica, C8, and C18
Particle Sizes	3µm and 5µm
Pore Size	100Å
Pore Volume	0.5mL/gm
Surface Area	190m^2/gm
Carbon%(w/w)	C8 = 7%(w/w), C18 = 12%(w/w)
Phase type	Monofunctional & fully endcapped
Silica Class	Type A
USP Class	L3 (HAISIL Silica) L7 (HAISIL 100 C8) L1 (HAISIL 100 C18)

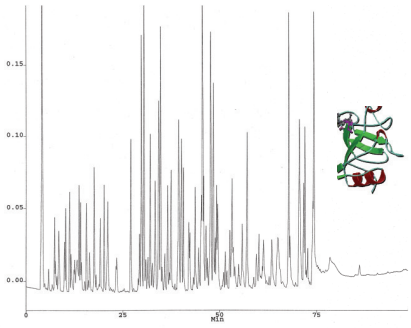
Guide to HAISIL 100 Part Numbers

Hx-xxxx-SIL3	HAISIL 100 Silica 3µm
Hx-xxxx-M183	HAISIL 100 C18 3µm
Hx-xxxx-SIL5	HAISIL 100 Silica 5µm
Hx-xxxx-M085	HAISIL 100 C8 5µm
Hx-xxxx-M185	HAISIL 100 C18 5µm

See Page 23 for complete Part Number information



Tryptic Map of Transferrin on HAI*SIL* 100
250x4.6mm P/N HS-2546-M185



Tryptic Map of Transferrin on HAI*SIL* 300
250x2.1mm P/N HS-2521-W185

Applications

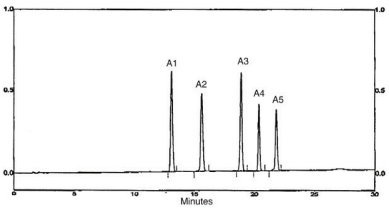
HAISIL 100 columns and cartridges are very good general purpose columns that are particularly well suited for small molecules and peptide applications. The HAISIL 100 column and cartridge efficiencies are unrivaled yet they represent one of the most economical product lines in the market today. In formats ranging from 0.075 to 20mm ID and from 10 to 250mm in length,

100Å vs. 300Å Columns for Peptide Mapping

The question of whether to use a 100Å or 300Å column for mapping usually divides peptide chromatographers into two groups. Rather than take sides, we have chosen to offer very efficient columns with both pore diameters to suit both camp's preferences. HAISIL 100 and HAISIL 300 columns are available in 10 to 250mm lengths and 0.075mm to 20mm internal diameters.

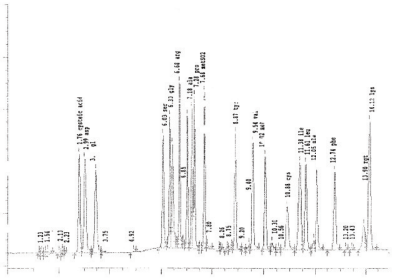
Hormone Analogs

LH-RH (Luteinizing Hormone - Releasing Hormone) Analogs are used for the inhibition of gonadal steroid production. An important application area is in the treatment of prostate cancer.



Conditions
HAISIL 100 C18 5µm 150x4.6mm
Solvent A: Phosphoric acid, ammonium sulfate aqueous buffer
Solvent B: Acetonitrile.
Linear gradient at 1mL/min
254nm detection

Analogs:
A1: pGlu-His-Trp-Ser-Tyr-(d-Ser(but))-Leu-Arg-Pro-NHEt
A2: pGlu-His-Trp-Ser-Tyr-d-Ala-Leu-Arg-Pro-NHEt
A3: pGlu-His-Trp-Ser-Tyr-d-Leu-Leu-Arg-Pro-NHEt
A4: pGlu-His-Trp-Ser-Tyr-d-Ala-Trp-Leu-Pro-NHEt
A5: pGlu-His-Trp-Ser-Tyr-d-Trp-Leu-Arg-Pro-NHEt

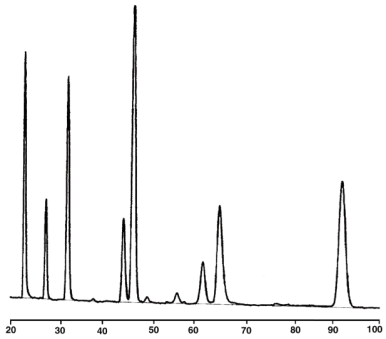


Economical Alternative for PICOTAG Analysis

Our HAISIL 100 C18 columns have demonstrated superior resolution and life time for PICOTAG™ amino acid analysis when compared to considerably more expensive columns from other manufacturers. Besides good linearity and column lifetime, the 150x4.6mm column yields very efficient amino acid analysis as shown in the chromatogram above (P/N HS-1546-M185).

Alkaloids

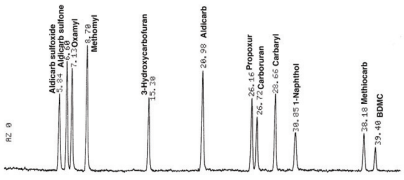
A Peruvian vine named "Una de Gato" (Uncaria tomentosa) and commonly referred to as Cat's Claw, has become a popular natural product source for herbal remedies. Enthusiasts claim the oxindole alkaloid extracts to be effective in the treatment of a wide range of digestive and circulatory diseases as well as other afflictions ranging from cancer to arthritis. Reputable providers of such phytochemical containing formulations carefully assay the alkaloid content of the extracts and formulations. The chromatogram above illustrates baseline resolution of Cat's Claw bark extracts containing isopteropodine, pteropodine, mitraphylline, isomitraphylline, ryncophylline and isorynchophylline.



Alkaloids from Cat's Claw
analyzed on a HAISIL 100 C18 column
P/N HS-2546-M185

HAISIL 100 - the Separations Work Horse

The 100Å pore size, monomeric bonded phase, and very high performance make HAISIL 100 an ideal choice for separations ranging from small molecules such as carbamate pesticides and pharmaceu-



Carbamate Pesticide Analysis
250 x 4.6mm HAISIL 100 C18

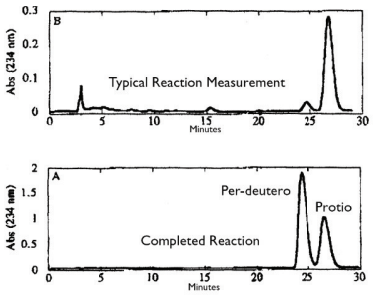
tical drugs to synthetic oligonucleotides and small peptides. High efficiency, symmetrical peaks, and long column life is characteristic not only of the C8 and C18 reverse phase columns, but the normal phase silica columns as well.

Kinetic Measurements in Disease Research

Researchers at the University of California, Santa Cruz have recently published a novel HPLC method that yields baseline separation of per-deuterated and protonated lipoxygenases.

The striking ability of a 250x4.6mm HAISIL 100 C18 column to resolve these two very similar compounds is enabling researchers to study large competitive kinetic isotope effects in Human 15-lipoxygenase catalysis. Protio/per-deutero ratio data obtained by this HPLC method agreed within experimental error of data obtained by ES-MS.

The elucidation of these mechanisms is noteworthy because of the increasing role human lipoxygenases are playing in inflammatory diseases and cancer growth regulation.



Enzymatic Reaction Mixtures of Human 15-lipoxygenase

HAISIL 100 C18 250x4.6mm
74.9% MeOH, 25% water, 0.1%HoAC
1mL/min, 234nm
P/N HS-2546-M185