

SquameScan™ 850A

Rapid determination of stratum corneum protein content on
tape stripping



The SquameScan™ 850A reduces the measuring time to
a few seconds per tape strip, consequently saving costs.

Additionally, the tape strip can be used subsequently for any other bioassay.

The instrument is designed to indirectly measure the stratum corneum (SC)

protein content on tape stripping like D-Squame[®] or Corneofix[®] [®].

Compared to the equipment for colorimetric determination, the SquameScan™ 850A has several advantages like low price, compact dimensions and easy handling.

Convenient and user-friendly determination is done by measuring the optical absorption of the strip at about 850nm (infrared light). The value is displayed in % and is translated into protein content by using a simple transfer function $y = a \cdot x - b$.

The infrared light prevents thermal denaturation of biomolecules and influence of ambient light to the measurement result.

The tape strips are placed adhesive side up into a carrier that takes up to 10 strips. The carrier avoids contamination of tape stripping during measurement and secures alignment of the tape stripping.

The measured diameter is 12.5mm, thus covering more than half of the available tape strip area. So the inhomogeneity of corneocyte distribution on the tape strippings is levelled.

The SquameScan™ 850A is equipped with an USB port to transfer the data to a Windows®-Application enabling efficient documentation and analysis of studies.

Technical data

Dimensions length x width x height	: 200 x 100 x 100 mm
Weight	: 1 kg
Voltage requirements	: 9...15V DC
Power consumption	: 3 VA
Measurement spot	: 12.5 mm
Reading geometry	: directed / directed
Spectral response	: 750 ... 950nm
Measurement range	: 0...50% absorption
Resolution	: 0.1% steps = 1 digit
Reading variation	: ± 5 digits
Repeat accuracy	: ± 3 digits
Temperature range	: 17 ... 27 °C
Relative humidity	: 0 ... 70 %
Accessory	: - Calibration proof strip - Power supply (90...240V AC), various main plugs - PC-Software for data transfer - Forceps - Probe carrier, has to be ordered separate

Issued by J. Heiland / R. Voegeli

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Technical data may change without notice.