

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	Elafin/SKALP, Human, clone TRABO2		
<b>Catalog number</b>	HM2062-20UG		
<b>Lot number</b>	-	<b>Expiry date</b>	-
<b>Volume</b>	200 µl	<b>Amount</b>	20 µg
<b>Formulation</b>	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	<b>Concentration</b>	100 µg/ml
<b>Host Species</b>	Mouse IgG1	<b>Conjugate</b>	None
<b>Endotoxin</b>	N.A.	<b>Purification</b>	Protein G
<b>Storage</b>	4°C		

**Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes		•				•		•
No	•							
N.D.			•	•	•		•	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:10.

- W: For Western blotting it is recommended to use non-reducing conditions.

**General Information**

**Description** Elafin is an epithelial proteinase inhibitor also known under various other names such as Skin-derived Anti leukoproteinase (SKALP) and Elastase-Specific Inhibitor (ESI). Elafin belongs to the Trappin gene family and was given the systematic name Trappin-2. The Trappin family is defined by a N-terminal transglutaminase substrate domain and a C-terminal four disulphide core. Trappins have been suggested to play a role in the regulation of inflammation and in protection against tissue damage in stratified epithelia. Elafin is an inhibitor of leukocyte elastase and proteinase-3 and is a substrate for transglutaminases. The protein is constitutively expressed in various epithelia including hair follicles, oesophagus, vagina and oral cavity. Elafin is not present in normal human skin but is strongly induced during inflammation as in psoriasis and wound healing. Antibodies to Elafin can be used to evaluate the effects of treatment of psoriasis since its expression is significantly correlated with clinical scores. Antibodies to Elafin have also been successfully used to study differentiation in squamous cell carcinoma of the head-and-neck region, oesophagus and skin. It is also shown that Elafin possesses antimicrobial activity against gram-positive and gram-negative bacteria. TRAB2O recognises all known Trappins via the GQDPVK epitope. TRAB2O shows strong reaction with human native full-length Elafin/SKALP and a weaker reaction with fully processed Elafin/SKALP (C-terminal 57 aa). For detection of fully processed Elafin/SKALP (C-terminal 57 aa) we advise to use HM2063. The antibody is cross reactive with Trappin family members of other species with GQDPVK epitope.

**Cross reactivity** Other species with GQDPVK epitope: Yes.

- References**
1. Vandermeeren, M et al; Development and application of monoclonal antibodies against SKALP/elafin and other trappin family members. Arch Dermatol Res 2001, 293: 343
  2. Alkemade, J et al; Demonstration of skin-derived antileukoproteinase (SKALP) and its target enzyme human leukocyte elastase in squamous carcinoma. J Pathol 1994, 174: 121
  3. Bergen van, H et al; Expression of SKALP/elafin during wound healing in human skin. Arch Dermatol Res 1996, 288: 458
  4. Pfundt, R et al; Constitutive and inducible expression of SKALP/elafin provides anti-elastase defense in human epithelia. J Clin Invest 1996, 98: 1389
  5. Schalkwijk, J et al; Localization of SKALP/elafin. J Invest Dermatol 1993, 100: 390
  6. Schalkwijk, J et al; The trappin gene family: proteins defined by an N-terminal transglutaminase substrate domain and a c-terminal four-disulphide core. Biochem J 1999, 340: 569
  7. Wiedow, O et al; Elafin: an elastase-specific inhibitor of human skin. J Biol Chem 1990, 265: 14791
  8. Huh, WK et al; Dynamic alteration of human beta-defensin 2 localization from cytoplasm to intercellular space in psoriatic skin. J Mol Med 2002, 80: 678

**Storage&stability** Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

**Precautions**

For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

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We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC  
Brenda Teunissen

Date  
14/07/2021

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).