10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Keratin 4 Recombinant Rabbit mAb

Catalog # AP100149

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P19013
Other Accession	P19013
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	56144
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Keratin 4
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the intermediate filament family.
SUBUNIT	Heterotetramer of two type I and two type II keratins. Keratin-4 is generally associated with keratin-13.
DISEASE	Defects in KRT4 are a cause of white sponge nevus of cannon (WSN) [MIM:193900]. WSN is a rare autosomal dominant disorder which predominantly affects non-cornified stratified squamous epithelia. Clinically, it is characterized by the presence of soft, white, and spongy plaques in the oral mucosa. The characteristic histopathologic features are epithelial thickening, parakeratosis, and vacuolization of the suprabasal layer of oral epithelial keratinocytes. Less frequently the mucous membranes of the nose, esophagus, genitalia and rectum are involved.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene is a member of the keratin gene family. The type II cytokeratins consist of basic or neutral proteins which are arranged in pairs of heterotypic keratin chains coexpressed during differentiation of simple and stratified epithelial tissues. This type II cytokeratin is specifically expressed in differentiated layers of the mucosal and esophageal epithelia with family member KRT13. Mutations in these genes have been associated with White Sponge Nevus, characterized by oral, esophageal, and anal leukoplakia. The type II cytokeratins are clustered in a region of chromosome 12q12-q13. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	3851
Other Names	K2C4_HUMAN; KRT4; Cytokeratin-4 (CK-4); Keratin-4 (K4); Type-II keratin Kb4; CYK4; keratin 4; cytokeratin 4; keratin, type II cytoskeletal 4
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,WB=1:500-2000

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	KRT4 (HGNC:6441)
Synonyms	CYK4
Function	Structural component of intermediate filaments in mucosal stratified squamous epithelia. Forms heteropolymers with the type I keratin KRT13, assembling into keratin intermediate filament networks that provides structural integrity and mechanical stability of the mucosal epithelium.
Tissue Location	Detected in the suprabasal layer of the stratified epithelium of the esophagus, exocervix, vagina, mouth and lingual mucosa, and in cells and cell clusters in the mucosa and serous gland ducts of the esophageal submucosa (at protein level). Expressed widely in the exocervix and esophageal epithelium, with lowest levels detected in the basal cell layer.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.