

**AP31679SU-N****Polyclonal Antibody to Cytokeratin 40 - Serum****Alternate names:**

CK-40, K40, KA36, KRT40, Keratin, Keratin 40, Keratin-40, Keratin40, Type I hair keratin Ka36, type I cytoskeletal 40

**Quantity:**

0.1 ml

**Background:**

Keratin 40 (KRT40), also known as Cytokeratin-40 (CK-40) or KA36, is a 431 amino acid protein that belongs to the intermediate filament family. As a heterotetramer of two type I and two type II keratins, Keratin 40 may play a role in late hair differentiation. While weakly expressed in tongue, breast, colon and small intestine, Keratin 40 is highly expressed in skin and scalp. The gene that encodes Keratin 40 consists of approximately 9,420 bases and maps to human chromosome 17q21.2. Encoding more than 1,200 genes, chromosome 17 comprises over 2.5% of the human genome. Two key tumor suppressor genes are associated with chromosome 17, namely, p53 and BRCA1. Malfunction or loss of p53 expression is associated with malignant cell growth and Li-Fraumeni syndrome. Like p53, BRCA1 is directly involved in DNA repair, though specifically it is recognized as a genetic determinant of early onset breast cancer and predisposition to cancers of ovary, colon, prostate gland and fallopian tubes.

**Uniprot ID:**

[Q6A162](#)

**NCBI:**

[NP\\_872303](#)

**GeneID:**

[125115](#)

**Host:**

Guinea Pig

**Immunogen:**

Synthetic peptide of human type I (acidic) hair (trichocytic) keratin K40 (former designation keratin Ka36) coupled to KLH

**AA Sequence:**

LPC YFT GSC NSP C

**Format:**

**State:** Stabilized antiserum containing 0.09% Sodium Azide as preservative

**Applications:**

**Immunofluorescence Microscopy on Frozen Sections.**

**Immunohistochemistry on Paraffin Sections** Only when using the microwave method (with citrate buffer).

*Working Dilution:* 1/100 for Immunohistochemistry.

*Incubation Time:* 1h at RT.

**Note:** For enhancement of staining preincubate fixed sections with 0.1 Triton X-100 (in PBS) for 1–5 min prior to first antibody incubation step.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:**

The antiserum stains specifically Human type I (acidic) hair Keratin K40 expressed in the late hair cuticle.

**Species:** Human. Negative with Mouse.

Other species not tested.

**Storage:** Store the antibody undiluted at 2-8°C.  
Shelf life: one year from despatch.

**General Readings:** 1. Langbein L, Rogers MA, Praetzel-Wunder S, Boeckler D, Schirmacher P, Schweizer J:  
The novel keratins K39 and K40 are the latest expressed type II hair keratins and  
complete the human hair keratin family. J Invest Dermatol 127, 1532-1535 (2007)