

## **Product datasheet for BM5042**

## OriGene Technologies, Inc.

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## Cytokeratin 5 (KRT5) (+ KRT8) Mouse Monoclonal Antibody [Clone ID: C22 (Ks 5+8.22)]

**Product data:** 

**Product Type:** Primary Antibodies

**Clone Name:** C22 (Ks 5+8.22)

**Applications:** IF, IHC, WB

Recommended Dilution: Western Blot.

Immunocytology.

**Immunohistochemistry on Frozen Tissues:** 1/10.

Incubation time: 1 h at RT.

**Immunohistochemistry on Paraffin-Embedded Tissues:** 1/10. Protease pretreatment is required prior to antibody application.

Incubation time: Overnight at 2-8°C.

**Reactivity:** Amphibian, Bovine, Human, Hydra, Mouse, Porcine

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Human keratin K8, purified from SDS PAGE gel.

**Specificity:** Antibody clone C22 represents an excellent marker for distinguishing carcinomas from all

non-epithelial tumors. The antibody specifically reacts with keratins K5 and K8 present in

nearly all epithelia.

*Polypeptide reacting*: Mr 52 500, Mr 58 000 keratins (type II keratins K5 and K8; formerly also

designated cytokeratins 5 and 8) of human epithelial cells.

Epitope has been mapped to aa 353-367 on alpha helical rod domain (see Waseem et al.,

2004).

Reactivities on cultured cell lines (tested so far): MCF-7, RT 112, HT-29, Detroit 562, RPMI

2650, SSC-12, bovine BMGE+H, BMGE-H, MDBK.

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**Formulation:** Final solution contains 0.09% Sodium Azide as preservative and 0.5% BSA as stabilizer in PBS

buffer, pH 7.4 State: Purified

State: Lyophilized purified IgG fraction

**Reconstitution Method:** Restore in 1 ml distilled water.

**Purification:** Affinity Chromatography on Protein A

Conjugation: Unconjugated

**Storage:** Prior to reconstitution store at 2-8°C.

Following reconstitution store the antibody undiluted at 2-8°C for one month

or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Gene Name:** keratin 5

Database Link: Entrez Gene 110308 MouseEntrez Gene 3852 Human

P13647

**Background:** Cytokeratin 5 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 the basal layer of the epidermis with family member KRT14. Mutations in these genes have been associated with a complex of diseases termed

epidermolysis bullosa simplex. The type II cytokeratins are clustered in a region of

chromosome 12q12-q13.

**Cytokeratin 8** is a member of the type II keratin family clustered on the long arm of chromosome 12. Type I and type II keratins heteropolymerize to form intermediate-sized filaments in the cytoplasm of epithelial cells. The product of this gene typically dimerizes with keratin 18 to form an intermediate filament in simple single-layered epithelial cells. This protein plays a role in maintaining cellular structural integrity and also functions in signal transduction and cellular differentiation. Mutations in this gene cause cryptogenic cirrhosis.

**Synonyms:** KRT5, Cytokeratin-5, Keratin-5, Keratin 5, CK5, K5