

Product datasheet for **AM32076PU-N**

Cytokeratin 7 (KRT7) (+ KRT17/19) Mouse Monoclonal Antibody [Clone ID: 4F5]

Product data:

Product Type:	Primary Antibodies
Clone Name:	4F5
Applications:	IHC, WB
Recommended Dilution:	Western blotting: at least 1/1000 dilution. Immunohistochemistry on Frozen Sections.
Reactivity:	Human, Porcine
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified Cytokeratins from cultured pig kidney epithelial cells. Hybridoma produced by fusion between myeloma cells and Balb/c spleen cells.
Specificity:	The antibody clone 4F5 recognizes Cytokeratins nos. 7, 17 and 19 typical for many simple epithelial cells but is found also in cells in squamous epithelia. <i>Cellular Localization:</i> Cytoplasmic.
Formulation:	PBS State: Purified State: Liquid purified IgG fraction Stabilizer: 0.09% Sodium Azide Preservative: 1.0% BSA
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C.
Stability:	Shelf life: one year from despatch.
Gene Name:	keratin 7
Database Link:	Entrez Gene 3855 Human P08729



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Background:

The cytokeratins are intermediate filament proteins responsible for the structural integrity of epithelial cells. Keratin proteins belong to 2 families: acidic (or type I) and basic (or type II). The acidic keratins are coded by genes KRT9 to 19, the basic keratins by genes KRT1 to 8. Cytokeratins 7, 17 and 19 are encoded by the genes KRT7, 17 and 19 respectively. Type I and II keratins are usually coordinately synthesized in preferential pairs so that at least 1 member of each family is expressed in each epithelial cell, in equal proportions. Cytokeratin 7 is specifically expressed in the simple epithelia lining the cavities of the internal organs and in the gland ducts and blood vessels. Cytokeratin 17 is normally expressed in the basal cells of complex epithelia (e.g. nail bed, hair follicle, sebaceous glands) but not in stratified or simple epithelia. Synthesis of cytokeratin 17 seems to be a marker of basal cell differentiation in complex epithelia. Mutations in the gene KRT17 lead to Jackson-Lawler type pachyonychia congenita and steatocystoma multiplex. Unlike its related family members, cytokeratin 19 (the smallest known acidic cytokeratin at 40kDa) is not paired with a basic cytokeratin in epithelial cells. It is specifically expressed in the periderm, the transiently superficial layer that envelopes the developing epidermis. It is often expressed in cultured epithelial cells and in some carcinomas.

Synonyms:

KRT7, KRT-7, SCL, CK-7, CK7, Keratin-7, K7, K-7, Sarcolectin