

DESCRIPTION

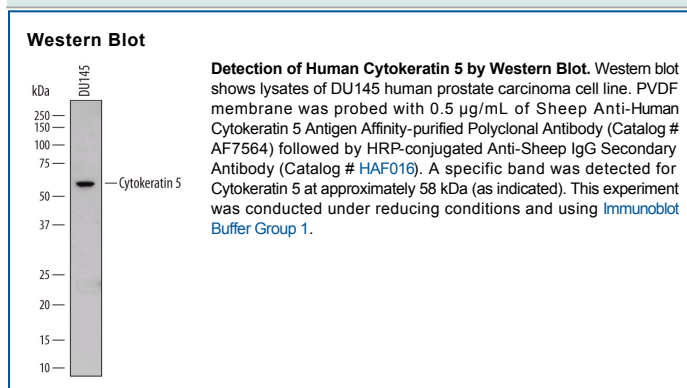
Species Reactivity	Human
Specificity	Detects human Cytokeratin 5 in direct ELISA and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) KRT-14, rhKRT-18, rhKRT-19, and rhKRT36 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Cytokeratin 5 Met1-Gly98 Accession # P13647
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Cytokeratin 5 (Keratin, type II cytoskeletal 5; also 58 kDa cytoke­ratin, CK-5 and Keratin-5) is a 58-59 kDa Class II (large keratins of basic pH) member of the intermediate filament family of proteins. Individual keratins are always expressed in tandem with a second keratin, and these are found in all epithelial cells. The class II KRT-5 heterodimerizes with 50-52 kDa class I KRT-14 to form 8 nm filaments that likely serve as a cytoskeletal scaffold. Both keratin-5 and -14 are also suggested to positively regulate keratinocyte cell cycle progression. Both keratins are associated with cells of sweat gland ducts and the basale layer cells of both keratinized stratified squamous plus transitional epithelium. Human cytoke­ratin 5 is 590 amino acids (aa) in length. It contains an N-terminal "head" region (aa 1-167), a subsequent "rod" region (aa 168-477) with two coiled segments, and a C-terminal tail region that is rich in serine (aa 478-590). Cytokeratin 5 possesses at least three utilized phosphorylation sites at Tyr60, Tyr 66 and Ser75. There are at least three potential isoform variants. One possesses a 26 aa substitution for aa 527-590, a second shows a deletion of aa 71-93, and a third contains an 11 aa substitution for aa 349-590. Over aa 1-98, human cytoke­ratin 5 shares 83% aa sequence identity with mouse cytoke­ratin 5.