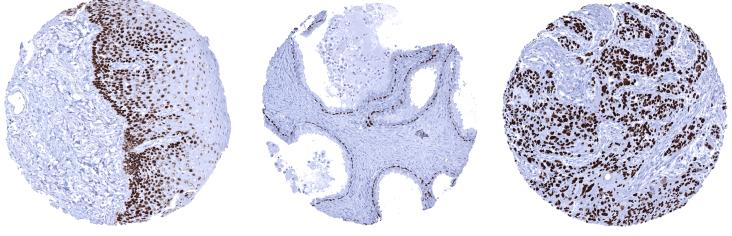


# Anti- p63 Antibody MSVA-063R / Recombinant Rabbit monoclonal

Human SwissProt	Q9H3D4
Human Gene Symbol	TP63
Synonyms	Amplified in squamous cell carcinoma (AIS); Chronic ulcerative stomatitis protein (CUSP); EEC3; Keratinocyte transcription factor KET; LMS; NBP; p40; P51/P63; p53 like transcription factor; p53-related protein p63; RHS; SHFM4; TAp63alpha; TP53CP; TP53L; TP63; TP73; TP73L; Transformation-related protein 63; Trp53rp1; Trp6;3; Tumor protein 63; Tumor protein p53-like; tumor protein p73-like
Specificity	P63
Immunogen	Recombinant human TP63 fragment
lsotype	Rabbit / IgG
Species Reactivity	Human

Localization	Nuclear
Storage & Stability	Antibody with azide – store at 2 to 8 C. Antibody without azide – store at -20 to -80 C. Antibody is stable for 24 months. Non- hazardous. No MSD required.
Supplied As	200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available without BSA
Positive Control	Tonsil: Virtually all squamous epithelial cells must show a moderate to strong, nuclear staining, while few scattered lymphocytes and endothelial cells must show a at least a weak staining.
Negative Control	Tonsil: The vast majority of lymphocytes should be p63 negative.



In the esophagus, a strong p63 staining occurs squamous epithelial cells

Strong nuclear p63 positivity in basal cells of prostate glands

Esophageal squamous cell carcinoma with intense p63 immunostaining of tumor cells

## Biology

Tumor protein 63 (p63) is a transcription factor of the p53 gene family encoded by the TP63 gene located at chromosome 3q28. p63 regulates the activity of a multitude of genes involved in growth and development of the ectoderm and derived structures and tissues, such as basal layer keratins and cell cycle control genes. p63 (syn. TAp63) is closely related to p40 (syn. ΔNp63) as both proteins represent isoforms of the p63 gene with distinct molecular functions. While "full length" p63 (TAp63) activates p53 target genes such as p21 or BAX, the shorter transcript p40 ( $\Delta$ Np63) inhibits activation of p53 and "full length" p63. In normal tissues, a strong p63 immunostaining occurs in squamous epithelium, urothelium, thymic epithelial cells, myoepithelial cells in salivary and breast glands, basal cells in prostate, seminal vesicle, and respiratory epithelium, chorion cells as well as in a fraction of cytotrophoblast cells of the placenta. Among tumors, p63 immunostaining most commonly occurs in squamous cell carcinomas, urothelial carcinomas, thymic tumors, basal cell carcinomas, and various types of salivary gland tumors. Other tumors may also be positive, although at lower frequency

#### **Potential Research Applications**

-A comprehensive study analyzing p63 expression in various different tumor entities would be helpful to assess the diagnostic significance of p63 IHC.

-The roles of p63 in multiple aspects of cancer, including tumorigenesis, cancer progression, and metastasis as well as how they impact other diseases are still not completely discovered.

## Protocol Suggestions

**Dilution: 1:150 ; pH 7,8 is optimal**. Freshly cut sections should be used (less than 10 days between cutting and staining deteriorates staining intensity for most antibodies in IHC).

### Limitations

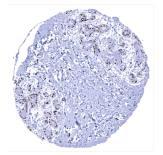
This antibody is available for **research use only** and is not approved for use in diagnostics.

#### Warranty

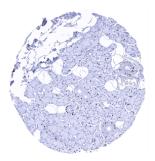
There are no warranties, expressed or implied, which extend beyond this description. MSVA is not liable for any personal injury or economic loss resulting from this product.



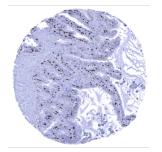
MS Validated Antibodies GmbH Bergstedter Chaussee 62a 22395 Hamburg, Germany Tel: +49 (0) 40 89 72 55 81 E-Mail:info@ms-validatedantibodies.com Website: ms-validatedantibodies.com



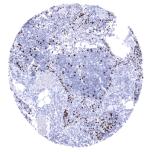
Breast - Marked nuclear p63 staining in myoepithelial cells



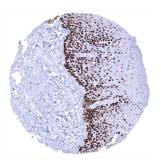
Parotid gland - Strong nuclear p63 positivity in myoepithelial cells



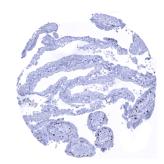
Seminal vesicle - Strong nuclear p63 positivity in basal cells



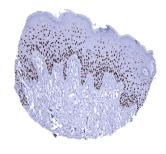
Thymus - Thymus epithelial cells exhibit a strong nuclear p63 staining



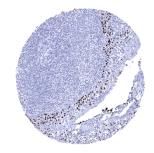
Esophagus, squamous epithelium p63 immunostaining is strongest in the more basally located cells of the esophageal squamous epithelium



Placenta, early - A strong nuclear p63 staining occurs in cytotrophoblast cells



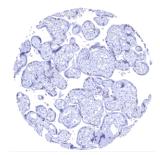
Skin - A positive p63 immunostaining is seen in virtually all squamous epithelial cells of the skin



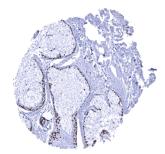
Tonsil - p63 staining is strongest in basally located cells of the squamous epithelium of tonsil crypts



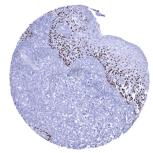
Kidney, pelvis (urothelium) - A moderate to strong p63 staining is predominantly seen in the lower half of the urothelium



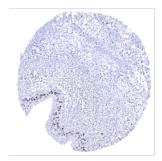
Placenta, mature - A moderate to strong nuclear p63 positivity is seen in cytotrophoblast cells



Skin - A strong p63 immunostaining occurs in peripheric germinative cells of sebaceous glands



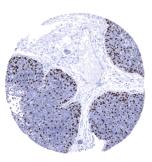
Tonsil, surface epithelium - A moderate to strong p63 staining is seen in most squamous epithelial cells



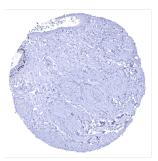
Kidney, pelvis (urothelium) - A moderate to strong p63 staining predominates in the lower half of the urothelium



Prostate - Strong nuclear p63 positivity in basal cells



Thymus - A strong nuclear p63 staining is seen in thymus epithelial cells



Urinary bladder, muscular wall - A positive p63 staining is seen in a small fragment of urothelium