

Mouse Anti-Ubiquitin-conjugating Enzyme E2S/UBE2S/EPF5 [MD387]: MC0499, MC0499RTU7

Intended Use: For Research Use Only

Description: The ubiquitin pathway involves three sequential enzymatic steps that facilitate the conjugation of ubiquitin and ubiquitin-like molecules to specific protein substrates. UBE2S, also known as ubiquitin-conjugating enzyme E2S or EPF5, is a 222 amino acid protein that plays a critical role in the ubiquitin-proteasome system, which is essential for regulating protein degradation and maintaining cellular homeostasis. UBE2S is primarily located in the cytoplasm and nucleus, where UBE2S facilitates the transfer of ubiquitin to target proteins, marking them for degradation. Proper functioning of UBE2S is vital, as dysregulation can lead to the accumulation of damaged or misfolded proteins, contributing to various diseases, including cancer. Notably, UBE2S has been implicated in enhancing tumor cell proliferation and metastasis through interactions with the von Hippel-Lindau pathway, highlighting UBE2S as a potential therapeutic target in cancer treatment.

Specifications

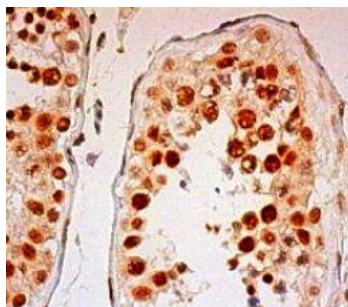
Clone:	MD388
Source:	Mouse
Isotype:	IgG1k
Reactivity:	Human, mouse, rat
Immunogen:	Human UBE2S protein aa 1-87 mapping at the N-terminus
Localization:	Cytoplasm, nucleus
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, ELISA, IF, WB
Package:	

Description	Catalog No.	Size
UBE2S/EPF5 [MD388] Concentrated	MC0499	1 ml
UBE2S/EPF5 [MD388] Prediluted	MC0499RTU7	7 ml

IHC Procedure*

Positive Control Tissue:	Testis, thyroid cancer
Concentrated Dilution:	25-200
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human testis stained with anti-UBE2S using DAB

References:

1. Ube2s expression is elevated in hepatocellular carcinoma and predicts poor prognosis of the patients. Qi Li, et al. Int J Clin Exp Pathol. Feb 1;11(2):781-787, 2018.
2. E2-EPF UCP targets pVHL for degradation and associates with tumor growth and metastasis. Jung, CR., et al. Nat Med. 12: 809-16. PMID: 16819549, 2006.
3. Emergence of young human genes after a burst of retroposition in primates. Marques, AC., et al. PLoS Biol. 3: e357, 2005. PMID: 16201836.

Doc. 100-MC0499

Rev. A