



Mouse Anti-Tex19.1 monoclonal antibody, clone 8UFY-2G22 (CABT-RM122)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Detects murine Testis-expressed protein 19.1 (Tex 19).
Target	Tex19.1
Immunogen	His-tagged full-length recombinant mouse Testis-expressed protein 19.1 (Tex 19).
Isotype	IgG2b, κ
Source/Host	Mouse
Species Reactivity	Mouse
Clone	8UFY-2G22
Purification	Protein G purified
Conjugate	unconjugated
Applications	ELISA, ICC, IHC, IP, WB
Molecular Weight	40.40 kDa calculated.
Format	Liquid
Size	100 µg
Buffer	0.1 M Tris-Glycine (pH 7.4), 150 mM NaCl
Preservative	0.05% sodium azide
Storage	Stable for 1 year at 2-8°C from date of receipt.

BACKGROUND

Introduction

Testis-expressed protein 19.1 is encoded by the Tex19.1 gene in murine species. Tex19.1 resides in the germline to repress transposable genetic elements and maintain genomic stability. It is expressed in testis, placenta, ovary, and in pluripotent stem cells. In testis its expression is highest in mitotic spermatogonia and decreases as spermatocytes progress through meiosis. Tex19.1 expression is reported to be down-regulated by Deleted in azoospermia-like (DAZL) protein, which binds to 3'UTR of Tex19.1 mRNAs and repress its translation. Tex19.1 is required during spermatogenesis and placenta development where it participates in the repression of retrotransposable elements and prevents their mobilization. Tex19.1, along with its paralog, Tex19.2, is shown to collaborate with the Piwi-interacting RNA (piRNA) pathway, which mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins. Embryos with mutations in Tex19.1 gene exhibit intra-uterine growth retardation and have small placentas due to a reduction in the number of spongiotrophoblast, glycogen trophoblast and sinusoidal trophoblast giant cells. Loss of Tex19.1 is shown to cause growth defect and early post-natal lethality. Male animals with deficiency of both Tex19.1 and Tex19.2 display impaired spermatogenesis, small testes, and are infertile.

Keywords

TEX19; testis expressed 19; testis-expressed sequence 19 protein; FLJ35767; mTex19.1; Tex19a

GENE INFORMATION

Entrez Gene ID

[73679](#)

UniProt ID

[Q99MV2](#)