

Marlin-1 is expressed in testis and associates to the cytoskeleton and GABAB receptors

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Marlin-1 is a GABAB receptor and Jak tyrosine kinase-binding protein that also associates with RNA and microtubules. In humans and rodents, expression of Marlin-1 is predominantly restricted to the brain, but expression in lymphoid cells has also been reported. Here, we have studied the distribution of Marlin-1 in testis and spermatozoa. Our results indicate that Marlin-1 is highly expressed in testis. The protein is abundant in spermatogonia, spermatocytes, spermatozoa, and Sertoli cells. We also have studied the subcellular distribution in spermatozoa. Marlin-1 is present in the tail and to a lesser degree in the head of the sperm cell. Finally, we have explored two protein interactions. Our findings demonstrate that Marlin-1 associates with a microtubule fraction and with GABAB receptors in testis suggesting that the set of protein interactions of Marlin-1 are conserved in different tissues. © 2007 Wiley-Liss, Inc.