

Technical Data Sheet

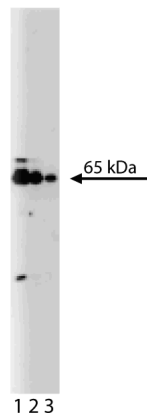
Purified Mouse Anti-TLS**Product Information**

Material Number:	611384
Size:	50 µg
Concentration:	250 µg/ml
Clone:	15/TLS
Immunogen:	Human TLS aa. 2-117.
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Rat
Target MW:	65 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Chromosomal translocations in leukemias and malignancies of non-hematopoietic tissues usually result in the fusion of genes and the production of novel fusion proteins. Translocated in liposarcoma (TLS/FUS) was identified through its fusion to the transcription factor CHOP in human myxoid liposarcoma. In addition, the fusion of TLS to the transcription factor ERG is involved in human acute myeloid leukemia. TLS contains an N-terminal Gln-, Ser-, and Tyr-rich region (QSY) that is thought to be a potent transactivator when fused with transcription factors. In its C-terminus, TLS contains a ribonucleoprotein consensus sequence (RNP-CS) and Arg-Gly-Gly (RGG) repeats that have been implicated in RNA binding. This feature allows it to function in shuttling of RNA from the nucleus. TLS also interacts with Ser-Arg proteins that regulate RNA splicing. Interestingly, TLS also interacts with the DNA binding domains of the estrogen, thyroid hormone, and glucocorticoid receptors. Thus, TLS is a multifunctional protein that is involved in RNA transport, nuclear receptor function, and gene transactivation when fused with transcription factors.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Western blot analysis of TLS on a Jurkat cell lysate.
Lane 1: 1:250, Lane 2: 1:500, Lane 3: 1:1000 dilution of the anti-TLS antibody.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20° C.

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
611451	Jurkat Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Igs	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Igs	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

- Hallier M, Lerga A, Barnache S, Tavitian A, Moreau-Gachelin F. The transcription factor Spi-1/PU.1 interacts with the potential splicing factor TLS. *J Biol Chem.* 1998; 273(9):4838-4842.(Biology)
- Morohoshi F, Ootsuka Y, Arai K, et al. Genomic structure of the human RBP56/hTAFII68 and FUS/TLS genes. *Gene.* 1998; 221(2):191-198.(Biology)
- Powers CA, Mathur M, Raaka BM, Ron D, Samuels HH. TLS (translocated-in-liposarcoma) is a high-affinity interactor for steroid, thyroid hormone, and retinoid receptors. *Mol Endocrinol.* 1998; 12(1):4-18.(Biology)
- Yang L, Embree LJ, Tsai S, Hickstein DD. Oncoprotein TLS interacts with serine-arginine proteins involved in RNA splicing. *J Biol Chem.* 1998; 273(43):27761-27764.(Biology)
- Zinszner H, Sok J, Immanuel D, Yin Y, Ron D. TLS (FUS) binds RNA in vivo and engages in nucleo-cytoplasmic shuttling. *J Cell Sci.* 1997; 110(15):1741-1750. (Biology)