PRODUCT INFORMATION

TEAD3 Cofactor-Binding Domain (human, recombinant)

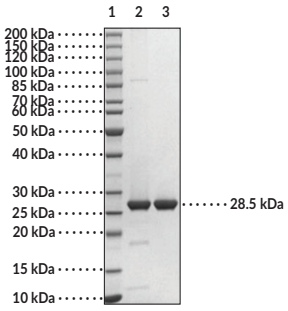
Item No. 41075

Overview and Properties

Synonyms: DTEF-1, ETFR-1, Embryonic TEA Domain-containing Factor 1, TEF-5, TEA Domain-containing Factor 1, TEA Domain Family Member 3, TEA Domain Transcription Factor 3, Transcriptional Enhancer Factor 5
Source: Recombinant human N-terminal His-tagged TEAD3 cofactor-binding domain expressed in insect cells
Amino Acids: 216-435
Uniprot No.: Q99594
Molecular Weight: 28.5 kDa
Storage: -80°C (as supplied); avoid repeated freeze/thaw cycles
Stability: ≥1 year
Supplied in: 50 mM Tris-HCl, pH 7.5, 200 mM sodium chloride, 20% glycerol, and 1 mM DTT
Protein Concentration: ***batch specific*** mg/ml
Special Conditions: Rapid thaw with running water.

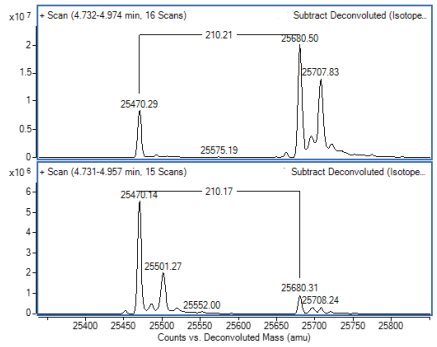
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Images



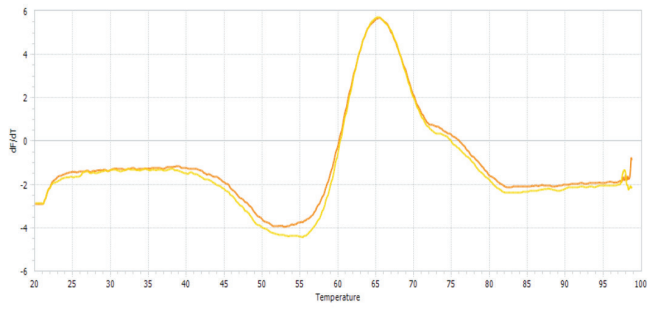
Lane 1: MW Markers
Lane 2: TEAD3 Cofactor-Binding Domain (2 µg, reduced)
Lane 3: TEAD3 Cofactor-Binding Domain (2 µg, non-reduced)

SDS-PAGE Analysis of TEAD3 Cofactor-Binding Domain.



TEAD3 Cofactor-Binding Domain (human, recombinant) depalmitoylation

Melting profile of TEAD3 Cofactor-Binding Domain



WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY
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Description

TEA domain transcription factor 3 (TEAD3) is a transcription factor and member of the TEA domain-containing family of transcription factors.[1] It is composed of an N-terminal TEA DNA-binding domain, a hydrophobic proline-rich domain, and a C-terminal cofactor-binding domain (CBD), which binds TAZ or YES-associated transcriptional regulator (YAP), or vestigial-like proteins (VGLLs), and is involved in TAZ-, YAP-, or VGLL-dependent transcription of genes in the Hippo signaling pathway, which regulates embryonic and organ development, proliferation, and cell death.[1,2] TEAD3 associates with VGLL3 to regulate growth and differentiation in primary mouse myoblasts and primary mouse myotubes.[3] The tertiary structure and function of TEAD3 require C-terminal palmitoylation at residue 371.[4] Increased tumor levels of TEAD3 are associated with decreased survival time, increased liver metastases, and reduced time of disease-free survival in patients with pancreatic ductal adenocarcinoma (PDAC).[5] Cayman's TEAD3 Cofactor-Binding Domain (human, recombinant) protein consists of 219 amino acids, has a calculated molecular weight of 28.5 kDa, and is depalmitoylated at cysteine 371.

References

1. Landin-Malt, A., Benhaddou, A., Zider, A., *et al*. An evolutionary, structural and functional overview of the mammalian TEAD1 and TEAD2 transcription factors. *Gene* **591(1)**, 292-303 (2016).
2. Gibault, F., Sturbaut, M., Bailly, F., *et al*. Targeting transcriptional enhanced associate domains (TEADs). *J. Med. Chem*. **61(12)**, 5057-5072 (2018).
3. Figeac, N., Mohamed, A.D., Sun, C., *et al*. VGLL3 operates via TEAD1, TEAD3 and TEAD4 to influence myogenesis in skeletal muscle. *J. Cell Sci.* **132(13)**, jcs225946 (2019).
4. Noland, C.L., Gierke, S., Schnier, P.D., *et al*. Palmitoylation of TEAD transcription factors is required for their stability and function in Hippo pathway signaling. *Structure* **24(1)**, 179-186 (2016).
5. Drexler, R., Fahy, R., Küchler, M., *et al*. Association of subcellular localization of TEAD transcription factors with outcome and progression in pancreatic ductal adenocarcinoma. *Pancreatology* **21(1)**, 170-179 (2021).

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