

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TGIF1 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 790715
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human TGIF1 Lys245-Ser359 Accession # Q15583
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Immunohistochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

TGIF1 (5'-TG[TCA]-3' Interacting Protein 1) also known as Transforming Growth Factor beta-induced Factor 1 and HPE4, is a 43 kDa (predicted) member of the TALE/TGIF homeobox family of proteins. It is widely expressed, and serves as a transcriptional corepressor for SMAD2-induced gene activation. Evidence suggests that it either complexes with c-jun and cPML, or interacts with HDAC in the nucleus to perform this function. It also binds to RXR response elements, blocking RXR-mediated gene activation. Such interactions are of considerable importance during fetal and neonatal development. Human TGIF1 is 401 amino acids (aa) in length. It contains a DNA-binding homeobox domain (aa 164-226) and two consecutive repressor domains (aa 267-401). There are multiple splice variants. One is very well characterized, is 33-35 kDa in size, and shows a four aa substitution for aa 1-133. This is most active when phosphorylated, which adds approximately 2-4 kDa to its SDS-PAGE MW. Two other splice forms contain a 19 aa substitution for aa 1-134, and utilize an alternative start site at Met150, respectively. Over aa 245-359, human TGIF1 shares 81% aa sequence identity with mouse TGIF1.

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