



RayBiotech, Inc.

3607 Parkway Lane suite 200
Norcross, GA 30092
Tel: 770-729-2992, 1-888-494-8555
Fax: 770-206-2393
Website: www.raybiotech.com
Email: info@raybiotech.com

Certificate of Analysis and Data Sheet

SHEEP ANTI HUMAN TGF ALPHA

With HRP-conjugated secondary antibody

Catalog No.

DS-PB-01932

Species:

Human

Isotype:

Sheep IgG

Description

Transforming growth factor- α (TGF α) is an acid- and heat-stable 50 amino acid protein of 5.5 kDa originally found in rodents and humans. TGF α is 33% homologous at the amino acid level to epidermal growth factor (EGF). TGF α binds to the EGF receptor, mediates tyrosine phosphorylation of the receptor and promotes anchorage-independent growth of normal rat fibroblasts in soft agar in the presence of transforming growth factor- β . TGF α is secreted by a variety of transformed cells and tumors, embryonic cells and some normal adult cells. TGF α bioactivity has been found in the urine of cancer patients. It has been suggested that it may act as an autocrine growth factor for the induction or maintenance of malignancy.

Applications

Table Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA	•			
Western Blotting			•	
Immunohistology - frozen			•	
Immunohistology - paraffin			•	
Immunohistology - resin			•	
Immunoprecipitation			•	
Flow Cytometry			•	
Immunofluorescence staining			•	
Neutralization			•	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



RayBiotech, Inc.

3607 Parkway Lane suite 200
Norcross, GA 30092
Tel: 770-729-2992, 1-888-494-8555
Fax: 770-206-2393
Website: www.raybiotech.com
Email: info@raybiotech.com

Preparation

Immunogen was mature human recombinant TGF-alpha conjugated to KLH. The IgG fraction was purified by ion exchange chromatography.

Specificity

DS-PB-01932 recognizes TGF-alpha (transforming growth factor alpha) from human, rat and bovine tissues and fluids. TGF-alpha is a 50 amino acid EGF-related polypeptide expressed in a range of tissues, including skin, pancreas, liver, duodenum, salivary glands, urinary and respiratory systems, and the developing and mature central nervous system (CNS). TGF-alpha is produced by monocytes, keratinocytes and neuronal cells and stimulates the proliferation of a range of epidermal and epithelial cells, through binding to the epidermal growth factor receptor (EGFR). TGFalpha is mitogenic for multipotent neural progenitors and is involved in astrogliosis. This antibody does not react with EGF or TGF-beta.

Reconstitution

Supplied as 500µg of purified antibody. It is reconstituted with sterile Borate buffer saline. Its final concentration is 3.1 mg/ml. **Please avoid freeze-thaw cycles.**

Secondary Antibody Applications

Options / Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Immunoassay (ELISA, Western blot)	•			1:5000-1:10000

Storage

Store at -20⁰C, if not intended for use within a month. Keep it at 4⁰C and minimize freezing and thawing when use.

Reference

Ju, W. *et al.* (1991) Tumorigenic transformation of NIH 3T3 cells by the autocrine synthesis of transforming growth factor alpha. *New Biol.* 3: 380-388.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**