**BACKGROUND**

Embryonic stem (ES) cells are the focus of much research and represent great therapeutic potential as they can be propagated indefinitely in an undifferentiated state while possessing the maintenance of ES cell pluripotency by suppressing spontaneous ES cell differentiation. Secreted LIF precursor is further processed into a biologically active glycoprotein. Expressed by a wide variety of cells including activated T lymphocytes, monocytes, mast cells and neuronal cells, LIF is suggested to promote survival and growth of axons in vitro and is involved in immune tolerance at the maternal-fetal interface. LIF may also participate in fat and bone metabolism and regulate epithelial conversion during kidney development.

**CHROMOSOMAL LOCATION**

Genetic locus: LIF (human) mapping to 22q12.2; Lif (mouse) mapping to 11 A1.

**SOURCE**

LIF (M-179) is a rabbit polyclonal antibody raised against amino acids 24-203 of LIF of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

LIF (M-179) is recommended for detection of LIF of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein [1 ml of cell lysate]), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of LIF precursor: 22 kDa.

Molecular Weight of mature glycosylated LIF: 40-45 kDa.

Positive Controls: PC-12 cell lysate: sc-2250, U-87 MG cell lysate: sc-2411 or KNRK whole cell lysate: sc-2214.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

**PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.