BACKGROUND
Growth/differentiation factors (GDFs) are members of the TGF superfamily. Members of the TGF superfamily are involved in embryonic development and adult tissue homeostasis. GDF-1 expression is almost exclusively restricted to the central nervous system and mediates cell differentiation events during embryonic development. Neither GDF-3 (Vgr-2) nor GDF-9 contains the conserved cysteine residue which is found in most other TGF superfamily members. GDF-3 is detectable in bone marrow, spleen, thymus and adipose tissue, whereas GDF-9 has only been detected in ovary. GDF-5 (also designated CDMP-1) has been shown to induce activation of plasminogen activator, thereby inducing angiogenesis. It is predominantly expressed in long bones during fetal embryonic development and is involved in bone formation. GDF-5 mutations have been identified in mice with the mutation brachypodism (bp), a mutation which affects the length and number of bones in limbs. GDF-6 and GDF-7 are closely related to GDF-5. GDF-8 has been shown to be a negative regulator of skeletal muscle growth.

CHROMOSOMAL LOCATION
Genetic locus: MSTN (human) mapping to 2q32.2; Mstn (mouse) mapping to 1 C1.1.

SOURCE
GDF-8 (1L4) is a mouse monoclonal antibody raised against recombinant GDF-8 protein of human origin.

PRODUCT
Each vial contains 100 µg IgG₂a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS
GDF-8 (1L4) is recommended for detection of GDF-8 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of GDF-8 precursor: 52 kDa.

Molecular Weight of mature GDF-8: 26 kDa.

Positive Controls: LNCaP cell lysate: sc-2231 or human GDF-8 transfected 293T whole cell lysate.

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

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

DATA
![Western blot analysis of GDF-8 expression in LNCAp whole cell lysate.](image)

SELECT PRODUCT CITATIONS

PROTOCOLS
See our website at www.scbt.com for detailed protocols and support products.

CONJUGATES
See GDF-8/11 (H-9): sc-393335 for GDF-8/11 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.