### Catalog nr
HM2187 (lot number and expiry date are indicated on the label)

### Description
The monoclonal antibody 2F1 reacts with human soluble leptin receptor (sLR) in plasma. Leptin is a cytokine that is primarily expressed by adipose tissue. Leptin controls food intake by its interaction with the leptin receptor in the brain. Leptin action is mediated and controlled by the leptin receptor, a class I type cytokine receptor. sLR is generated by proteolytic cleavage of membrane-anchored receptors. This indicates that the leptin receptor might have other functions besides transduction. Binding of leptin with sLR increases the bioavailability of leptin in plasma, but also decreases the binding of leptin to membrane bound leptin receptors. For example, when comparing obese and lean individuals, plasma levels of sLR are significantly decreased whereas leptin levels are significantly increased. The monoclonal antibody 2F1 specifically reacts with sLR with a molecular mass of 180kD. The 2F1 antibody can be used to measure in both free sLR and sLR bound to leptin in plasma.

### Species
Mouse IgG1

### Formulation
1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.02% sodium azide and 0.1% bovine serum albumin.

### Application
The monoclonal antibody 2F1 can be used as coating antibody for immuno assays. Furthermore, the monoclonal antibody 2F1 can be used for Western blot and is useful for histology on both frozen and paraffin embedded sections.

### Use
For Western blot, immuno assays and immunohistology dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

### Storage and stability
Product should be stored at 4°C. Under recommended storage conditions, product is stable for one year.

### Precautions
For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and Federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result with the use of or derivation of this product.

### References
1. van Dielen, F et al; Leptin and soluble leptin receptor levels in obese and weight-losing individuals. J Clin Endocrinol Metab 2002, 87: 1708

### Also available
- HP9028 Polyclonal antibody against Human A-FABP
- HP9029 Polyclonal antibody against Human E-FABP