

**DESCRIPTION**

**Source** Mouse myeloma cell line, NS0-derived mouse FOLR2 protein  
Met-Ser227, with a C-terminal 6-His tag  
Accession # Q05685

**N-terminal Sequence Analysis** Arg21

**Predicted Molecular Mass** 25.1 kDa

**SPECIFICATIONS**

**SDS-PAGE** 30-37 kDa, reducing conditions

**Activity** Measured by its ability to bind Folic Acid-Bovine Serum Albumin with an estimated  $K_d < 1.6$  nM.

**Endotoxin Level** <0.01 EU per 1 µg of the protein by the LAL method.

**Purity** >95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

**Formulation** Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

**Reconstitution** Reconstitute at 100 µg/mL in PBS.

**Shipping** The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** **Use a manual defrost freezer and avoid repeated freeze-thaw cycles.**

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

Folate Receptor 2 (FOLR2), also known as Folate Receptor beta, is a 38 kDa protein that mediates the cellular uptake of folic acid and reduced folates. Dietary folates are required for many key metabolic processes including nucleotide and methionine synthesis, the interconversion of glycine and serine, and histidine breakdown (1, 2). Mature FOLR2 is an N-glycosylated protein that is anchored to the cell surface by a GPI linkage (3 - 5). Mouse FOLR2 shares 82% and 91% amino acid sequence identity with human and rat FOLR2, respectively. FOLR2 is predominantly expressed in placenta, cells of the neutrophilic lineage, and some CD34+ hematopoietic progenitor cells (4, 6, 7). It is up-regulated on myeloid leukemias, head and neck squamous cell carcinomas, and several nonepithelial cancers (3, 6, 8). It is also up-regulated on immunosuppressive tumor-associated macrophages as well as on macrophages and monocytes at chronic inflammatory sites including rheumatoid arthritis synovium and glioblastoma (9 - 12). FOLR2 knockout mice do not show gross morphological defects, but they exhibit increased sensitivity to arsenate-induced teratogenicity (13, 14).

**References:**

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