

# Recombinant Mouse FGF1

Cat No:HR2R2117

For research use only

## Overview

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| Quantity           | 1.0 ?g                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Gene Symbol        | FGF1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Gene ID            | 14164                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Accession          | P61148                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Alternative Name   | aFGF, Fibroblast growth factor 1, FGF-1, Heparin-binding growth factor 1, HBGF-1<br>Recombinant Mouse Acidic Fibroblast Growth Factor (FGF1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Species            | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Source             | E. coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Description        | aFGF and bFGF display 55 % homology which is limited, however, to a few functional domains. The structure of aFGF, revealed by X-ray crystallography, shows a similar folding structure as IL-1. Because aFGF binds to the same receptor as bFGF, aFGF displays more or less the same spectrum of activities. It is, however, generally less active than bFGF in similar assays. FGF receptors are encoded by a gene family consisting of at least four receptor tyrosine kinases that transduce signals important in a variety of developmental and physiological processes related to cell growth and differentiation. |
| Functions          | The ED(50) as determined by the dose-dependent stimulation of thymidine uptake by BaF3 cells expressing FGF receptors is ? 10 ng/mL, corresponding to a specific activity of ? 1.0 x 10 <sup>5</sup> units/mg.                                                                                                                                                                                                                                                                                                                                                                                                           |
| Formulation        | Recombinant mouse aFGF was lyophilized from a 0.2 ?m filtered PBS solution.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Solubility         | A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Appearance         | Lyophilized Powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Molecular Weight   | 16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Purity             | >95% as determined by SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Concentration      | <1.0 EU/?g of recombinant protein as determined by the LAL method.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Shipping Condition | Ambient Temperature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Storage Condition  | The lyophilized protein is stable for at least one year from date of receipt at -70°C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8°C for one month, or at -20°C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.                                                                                                                                                                                                                                                                                                        |