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| <b>Product:</b>               | <b>ALKALINE PHOSPHATASE</b>   |
| <b>Product code:</b>          | <b>ALPI8F</b>   |
| <b>E.C. number:</b>           | 3.1.3.1   |
| <b>CAS number:</b>            | 9001-78-9   |
| <b>EINECS number:</b>         | 232-631-4   |
| <b>Systematic name:</b>       | Orthophosphoric-monoester phosphohydrolase (alkaline optimum).  |
| <b>Alternative name:</b>      | Alkaline phosphomonoesterase; Phosphomonoesterase; Glycerophosphatase.  |
| <b>Source:</b>                | Bovine intestinal mucosa  |
| <b>Form:</b>                  | A Freeze-dried material.  |
| <b>Solubility</b>             | Dissolves readily at 5mg/ml in enzyme diluent to form a clear solution.   |
| <b>Storage conditions:</b>    | Store desiccated at -15°C or below. Allow to come to room temperature before opening. Before returning to storage, re-desiccate under vacuum over silica gel for a minimum of four hours. Re-seal before returning to -15°C or below.   |
| <b>Unit definition:</b>       | <b>Diethanolamine, 37°C, pH 9.8</b><br>That amount of enzyme causing the hydrolysis of one micromole of p-nitrophenyl phosphate per minute at 37°C and pH 9.8.<br><b>Glycine, 25°C, pH 9.6</b><br>That amount of enzyme causing the hydrolysis of one micromole of p-nitrophenyl phosphate per minute at 25°C and pH 9.6. |
| <b>Specific activity:</b>     | Not less than <b>2000 DEA U/mg protein</b> , (Equivalent to approximately 667 Glycine U/mg protein)   |
| <b>Bovine IgG:</b>            | Not detectable  |
| <b>Chromatogram analysis:</b> | Greater than 90% pure by molecular exclusion chromatography   |

#### Typical properties

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| <b>Protein Concentration:</b>  | 0.15 to 0.45 mg/mg protein (Determined by Biuret procedure) |
| <b>Available amino groups:</b> | 8 - 13 moles amino groups per mole enzyme                   |
| <b>Carbohydrate content:</b>   | 4.0 – 6.5%  |