

## Mouse BMP-2 ELISA Kit | BMP2 elisa kit

Mouse BMP-2 PicoKine ELISA Kit

|                              |                            |
|------------------------------|----------------------------|
| CATALOG #<br><b>AAA45296</b> | REACTIVITY<br><b>Mouse</b> |
|------------------------------|----------------------------|

### PRODUCT SYNONYMS

BMP-2; Mouse BMP-2 PicoKine ELISA Kit; Bone morphogenetic protein 2; bone morphogenetic protein 2; BDA2; BMP-2A; Bmp2; BMP2\_HUMAN; BMP2A; Bone morphogenetic protein 2A; BMP2 elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                       |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity              | Mouse                                                                                                                                                 |
| Specificity             | Natural and recombinant mouse BMP-2                                                                                                                   |
| Sequence Length         | 394                                                                                                                                                   |
| Samples                 | Bone tissue, cell culture supernates and serum                                                                                                        |
| Assay Type              | Sandwich                                                                                                                                              |
| Detection Range         | 62.5pg/ml-4000pg/ml                                                                                                                                   |
| Sensitivity             | < 2pg/ml                                                                                                                                              |
| Intra-assay Precision   | Intra-Assay Precision (Precision within an assay) Three samples of known concentration were tested on one plate to assess intra-assay precision.      |
| Inter-assay Precision   | Inter-Assay Precision (Precision between assays) Three samples of known concentration were tested in separate assays to assess inter-assay precision. |
| Preparation and Storage | Store at 4 degree C for 6 months, at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles (Shipped with wet ice.)                            |

### IMAGES



**Standard Curve (Sample)**

Mouse BMP-2 PicoKine ELISA Kit standard curve

ADDITIONAL INFORMATION

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for BMP2 elisa kit | <p><b>Principle of the assay:</b> mouse BMP-2 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for BMP-2 has been precoated onto 96-well plates. Standards(CHO, Q283-R396) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for BMP-2 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the mouse BMP-2 amount of sample captured in plate.</p> <p><b>Background:</b> Bone morphogenetic protein-2 (BMP-2, BMP 2A) belongs to the transforming growth factor beta (TGF-beta) superfamily. It is thought to be involved in cartilage and bone formation during embryogenesis, but may have additional functions in morphogenesis as implied by its expression in various organs and embryonic tissues of mice.1 BMP-2 has been identified as a candidate mediator of retinoid activity. BMP-2 protein induces medulloblastoma cell apoptosis, whereas the BMP-2 antagonist noggin blocks both retinoid and BMP-2-induced apoptosis. BMP-2 also induces p38 mitogen-activated protein kinase (MAPK), which is necessary for BMP-2 and retinoid-induced apoptosis.2 Bone morphogenic proteins (BMPs) are known to promote osteogenesis, and clinical trials are currently underway to evaluate the ability of certain BMPs to promote fracture-healing and spinal fusion.3 The standard product used in this kit is recombinant mouse BMP-2, constituting dimer by two chains of 114 amino acids with the molecular mass of 26KDa.</p> |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NCBI AND UNIPROT INFORMATION

|                                  |                                                             |
|----------------------------------|-------------------------------------------------------------|
| NCBI GI #                        | 341940568                                                   |
| NCBI GeneID                      | 12156                                                       |
| UniProt Accession #              | P21274; Q497W8                                              |
| Molecular Weight                 | 44,525 Da                                                   |
| NCBI Official Full Name          | Bone morphogenetic protein 2                                |
| NCBI Official Synonym Full Names | bone morphogenetic protein 2                                |
| NCBI Official Symbol             | Bmp2                                                        |
| NCBI Official Synonym Symbols    | Bmp2a; AI467020                                             |
| NCBI Protein Information         | bone morphogenetic protein 2; bone morphogenetic protein 2A |
| UniProt Protein Name             | Bone morphogenetic protein 2                                |
| UniProt Gene Name                | Bmp2                                                        |
| UniProt Synonym Gene Names       | Bmp-2; BMP-2; BMP-2A                                        |
| UniProt Entry Name               | BMP2_MOUSE                                                  |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.