

GASP-1, human recombinant

CATALOG #: 7152-10 10 µg
7152-50 50 µg

ALTERNATE NAMES: GDF-associated serum protein-1, GASP, KIAA0443, WFIKKNRP

SOURCE: CHO cells

PURITY: ≥ 95% by SDS-PAGE gel and HPLC analyses

MOL. WEIGHT: 55-66 kDa

ENDOTOXIN LEVEL: < 0.1 ng/µg of protein (<1EU/µg).

FORM: Lyophilized

FORMULATION: Sterile filtered through a 0.2 micron filter. Lyophilized from 10 mM sodium phosphate, pH 7.8.

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C to -80°C. Avoid repeated freezing and thawing cycles.

RECONSTITUTION:
Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

DESCRIPTION:
Growth and differentiation factor-associated serum protein-1 (GASP-1) is a secreted inhibitory TGF-β binding protein that contains multiple protease inhibitor structural domains. It is expressed primarily in the ovary, testis, and brain, and can act as a potent soluble inhibitor of myostatin and GDF-11, but not Activin-A. The GASP-1 gene encodes a 571 amino acid protein that contains a 29 amino acid secretion signal sequence, and multiple identifiable structural features, including a WAP domain, a follistatin/Kazal domain, an immunoglobulin domain, two tandem Kunitz domains, and a netrin domain. Recombinant human GASP-1 is a 542 amino acid protein that migrates at an apparent

molecular weight of approximately 55-66 kDa by SDS-PAGE analysis under non-reducing conditions.

BIOLOGICAL ACTIVITY:
Determined by its ability to inhibit human Myostatin (GDF-8) activity in MCP-11 cells. The ED₅₀ for this effect is 0.0025-0.0040 ug/ml in the presence of 5ng/ml of human Myostatin (GDF-8)

AMINO ACID SEQUENCE:

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LPPIRYSHAG ICPNDMNPNL WVDAQSTCRR ECETDQECET YEKCCPNVCG
TKSCVAARYM DVKGGKGPVG MPKEATCDHF MCLQQGSECD IWDGQPVCKC
KDRCEKEPSF TCASDGLTYT NRCYMDAEAC SKGITLAVVT CRYHFTWPNT
SPPPPETTMH PTTASPETPE LDMAAPALLN NPVHQSVTMG ETVSFLCDVV
GRPRPEITWE KQLEDRENVV MRPNHVRGNV VVTNIAQLVI YNAQLQDAGI
YTCTARNVAG VLRADFPLSV VRGHQAAATS ESSPNGTAFP AADECLKPPDS
EDCGEEQTRW HFDAQANNCL TFTFGHCHRN LNHFETYEAC MLACMSGPLA
ACSLPALQGP CKAYAPRWAY NSQTGQCQSF VYGGCEGNGN NFESREACEE
SCPFPRGNQR CRACKPRQKL VTSFCRSDFV ILGRVSELTE EPDSGRALVT
VDEVLKDEKM GLKFLGQEPL EVTLLHVDWA CPCPNVTVSE MPLIIMGEVD
GGMAMLRPDS FVGASSARRV RKLREVMHKK TCDVLKFLGLH
    
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- RELATED PRODUCTS:**
- Human Recombinant Cystatin C (Cat. No. 4878-10, -50)
 - Cystatin A Antibody (Clone WR 23/2/3/3) (Cat. No. 3486-100)
 - Cystatin B Antibody (Clone RJMW2E7) (Cat. No. 3487-100)

FOR RESEARCH USE ONLY! Not to be used in humans.