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CGA, FSHB
Native Human Follicle Stimulating Hormone, High Purity

Catalog No.	CRH205A CRH205B	**Quantity:**	100 µg 1.0 mg

Alternate Names: Glycoprotein hormones alpha chain, Follitropin subunit alpha, FSH-alpha + Follitropin subunit beta, FSH-beta

Description: Native human FSH is a glycoprotein produced from pituitary glands. FSH is a heterodimeric hormone consisting of a 92 amino acids alpha subunit and a 111 amino acids beta subunit. The two principal gonadotropins in vertebrates are luteinizing hormone (LH) and follicle-stimulating hormone (FSH), although primates produce a third gonadotropin called chorionic gonadotropin (CG). LH and FSH are heterodimers consisting of two peptide chains, an alpha chain and a beta chain. LH and FSH share nearly identical alpha chains whereas the beta chain provides specificity for receptor interactions.
The alpha subunit, common to each protein dimer (well conserved within species, but differing between them), and a unique beta subunit which confers biological specificity. The alpha chains are highly conserved proteins of about 100 amino acid residues which contain ten conserved cysteines all involved in disulfide bonds. Intracellular levels of free alpha subunits are greater than those of the mature glycoprotein, implying that hormone assembly is limited by the amount of the specific beta subunit, and that synthesis of alpha and beta is independently regulated.

UniProt ID: P01215, P01225

Source: Human pituitary glands

Molecular Weight: 30 kDa

Formulation: Lyophilized from 50 mM ammonium bicarbonate

Purity: ≥ 95% by SDS-PAGE
LH: < 42.5 IU/mg (All < 0.5% w/w)
TSH: < 0.0425 IU/mg
hGH: < 0.005 mg/mg
PRL: < 0.005 mg/mg

Reconstitution: **Pituitary hormones such as FSH are extremely labile in solution. Reconstitute immediately prior to use**. **Centrifuge vial prior to opening to consolidate the solids.** Add buffer directly to the vial to yield a concentration of 1.0 mg/ml. Use a physiologic solution such as PBS or TBS, at a neutral pH. Include a carrier protein such as 1% BSA. If your application precludes the use of a carrier protein, reconstitute product at 5 - 10 mg/ml. **Avoid extreme high and low pH.**

Storage & Stability: Store as supplied for up to 1 year at -20°C to -80°C. It is recommended to use the product immediately following reconstitution. If storage is necessary following reconstitution, prepare single-use aliquots and immediately store at -80°C for up to 3 months. **Avoid repeated freeze/thaw cycles.**

Infectious Disease Testing: Negative or non-reactive at the donor level for anti-HIV 1 and 2, anti-HCV, HBsAg, HCV NAT, HIV-1 NAT and syphilis by FDA approved methods.

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