

# human Follicle stimulating Hormone

## FSH from pregnant women

| Product   | Cat#       | Package size |
|---|------------|--------------|
| human Follicle stimulating Hormone (FSH from post-menopausal women) | C6468.0100 | 100IU        |
| human Follicle stimulating Hormone (FSH from post-menopausal women) | C6468.0500 | 500IU        |
| human Follicle stimulating Hormone (FSH from post-menopausal women) | C6468.5000 | 5000IU       |

**Synonyms:** Folliotropin subunit beta, Follicle-stimulating hormone beta subunit, FSH-beta, FSH-B, Folliotropin beta chain, FSH.

### Product description

Human FSH is a glycoprotein that is isolated from urine of post-menopausal women. The protein shows a molecular weight of 30 kDa. FSH is a heterodimeric hormone consisting of an "a" chain of 92 amino acids and a "b2 chain of 111 amino acids.

Follicle stimulating hormone (FSH) is a hormone synthesized and secreted by gonadotropes in the anterior pituitary gland. FSH and LH act synergistically in reproduction. In women, in the ovary FSH stimulates the growth of immature Graafian follicles to maturation. As the follicle grows it releases inhibin, which shuts down the FSH production.

In men, FSH enhances the production of androgen-binding protein by the Sertoli cells of the testes and is critical for spermatogenesis. In both males and females, FSH stimulates the maturation of germ cells. In females, FSH initiates follicular growth, specifically affecting granulosa cells. With the concomitant rise in inhibin B FSH levels then decline in the late follicular phase. This seems to be critical in selecting only the most advanced follicle to proceed to ovulation. At the end of the luteal phase, there is a slight rise in FSH that seems to be of importance to start the next ovulatory cycle.

Like its partner, LH, FSH released by the pituitary gland is controlled by pulses of gonadotropin-releasing hormone (GnRH). Those pulses, in turn, are subject to the estrogen feed-back from the gonads.

**Source:** Urine of post-menopausal women

**Purity/Contaminants:** Less than: 0.1% hCG, 0.5%TSH, 0.5% LH, 0.5%GH and 0.5%PrL.  
Free of HbsAg, antibodies to HIV and HCV

**Formulation:** FSH is lyophilized without any additives.

**Appearance:** White or slightly yellow powder.

### Stability

Lyophilized FSH although stable at room temperature for 3 weeks, should be stored desiccated below -20°C. Upon reconstitution FSH should be stored at +2°C to +8°C between 2-7 days and for future use below -20°C. For long term storage we recommend adding a carrier protein (e.g., 0.1% HSA or 0.1% BSA).

**Please prevent from repeated freeze-thawing cycles.**

### Reconstitution

It is recommended to reconstitute the lyophilized Follicle Stimulating Hormone in sterile pyrogen free water at 2,000IU/mL, which can then be further diluted to other aqueous solutions.

### Usage

This product is for research/laboratory usage only. It may not be used as drug, agricultural or pesticidal product, food additive or household chemical.