

# Datasheet

## Recombinant Human Activin AB

## CARRIER-FREE

**Catalog Number:** PR15011CF

**Product Type:** Recombinant protein

**Source:** DNA sequences encoding human Activin  $\beta$ A chain and human  $\beta$ B chain (Mason, A.J. *et al.*, 1986, *Biochem. Biophys. Res. Commun.* **135**:957 - 964) were expressed in CHO cells.

**Molecular Mass:** The mature recombinant human Activin AB, generated by proteolytic removal of the propeptides, is a disulfide-linked heterodimer of the mature human Activin  $\beta$ A chain and mature human Activin  $\beta$ B chain. Based on N-terminal sequencing,  $\beta$ A chain starts at Gly 311 and  $\beta$ B chain starts at Gly 293. The A and B monomers of recombinant human Activin AB have the same apparent molecular mass of approximately 14 kDa in SDS-PAGE under reducing conditions.

**Purity:** > 90%, as determined by SDS-PAGE and visualized by silver stain.

**Endotoxin Levels:** < 1.0 EU per 1  $\mu$ g of the enzyme as determined by the LAL method.

**Activity:** Measured by its ability to induce hemoglobin expression in K562 cells (Schwall, R.H. *et al.*, 1991, *Method Enzymol.* **198**:340).

The ED<sub>50</sub> for this effect is typically 0.5 - 2 ng/mL.

**Format:** Lyophilized from a 0.2  $\mu$ m filtered solution in 35% CH<sub>3</sub>CN, 0.1% TFA.

**Reconstitution:** It is recommended that sterile PBS be added to the vial to prepare a working stock solution of no less than 100  $\mu$ g/mL. The carrier-free protein should be used immediately upon reconstitution to avoid losses in activity due to non-specific binding to the inside surface of the vial. For long term storage as a dilute solution, a carrier protein (e.g. 0.1% HSA or BSA) should be added to the vial.

**Storage:** Lyophilized samples are stable for up to six months at -20° C to -70° C.

Upon reconstitution, this cytokine, in the presence of a carrier protein, can be stored under sterile conditions at 2 - 8° C for one month or at -20° C to -70° C in a **manual defrost freezer** for three months without detectable loss of activity.

**Avoid repeated freeze-thaw cycles.**