



Certificate of Analysis

Proteasome 26S (Untagged, Human)

For research use only

Product Details

A highly purified preparation of 26S proteasomes, useful for carrying out in vitro protein degradation studies with suitably ubiquitinylated protein substrates. Consists of a high purity mixture of 26S proteasomes singly (26S) and doubly (30S) capped with 19S regulatory subunit complexes in the ratio of 40% single cap: 60% double capped at the time of preparation.

Source: Purified from human red blood cells by fractionation. Soluble and homogenous. All starting material has been tested and found to be negative for hepatitis B surface antigen, human immunodeficiency virus type 1 antigen, antibodies against human immunodeficiency viruses type 1 and 2, and hepatitis C virus.

Formulation: Liquid. Suspended in TSD buffer ($50\mu g$ in 10mM TRIS, containing 25mM KCl, 1.1mM MgCl₂, 0.1mM EDTA, 1mM DTT, 1mM sodium azide, 2mM ATP, pH 7.0, and 35% glycerol).

Purity: >95%, by SDS-PAGE.

Shipping: Shipped on Dry Ice.

Long Term Storage: -80°C.

Use/Stability: When ready for use the enzyme should be thawed by standing on ice. If the enzymatic activity of the 26S proteasome is to be measured, it should be used immediately after thawing since the enzyme complex is labile. After dissociation of the 26S complex the 20S proteasome activity is relatively stable.

Figure 1. 26S proteasome purified from human erythrocytes: Human 26S proteasomes were purified to apparent homogeneity. **(A)** Coomassie stained 12% SDS-PAGE of purified human 26S proteasome. **(B)** Purified human 26S proteasomes were separated by 4% native – PAGE and analyzed by overly assays using Suc-LLVY-AMC. **(C)** Coomassie stained 4% native PAGE of purified human 26S proteasome. **(D)** Immunoblotting described cleavage of Di-Ub (K63) by 26S as a 19S activity assay.

