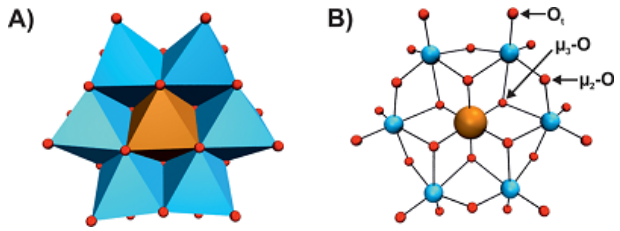
DATA SHEET

Jena Bioscience

Anderson-Evans polyoxotungstate

Cat. No.	Amount
X-TEW-1	1 g



Polyhedral (A) and ball and stick (B) representation of $[TeW_6O_{24}]^{6-}$ with different coordination modes of the oxygen atoms in panel B.[1] Figure used by courtesy of Prof. Annette Rompel, University of Vienna.

For *in vitro* use only!

Shipping: shipped at ambient temperature

Storage Conditions: store at ambient temperature

Shelf Life: 12 months

Molecular Formula: $Na_6[TeW_6O_{24}] \times 22\ H_2O$

Molecular Weight: 2148,90 g/mol

Solubility: 100 mM in water

Dissolve 1 g $Na_6[TeW_6O_{24}] \times 22\ H_2O$ in 4,65 ml water to achieve a 100 mM stock solution.

Description:
The Anderson-Evans polyoxotungstate $[TeW_6O_{24}]^{6-}$ (TEW) is a universal and flexible additive for protein crystallization. With its planar structure and high negative charge, it has proven to promote crystal contacts, improve crystal quality and further provides a valuable anomalous signal for phasing due to 6 tungsten atoms[1].

Related Products:
XP Screen, #CS-350

Selected References:
[1] Bijelic *et al.* (2017) Ten Good Reasons for the Use of the Tellurium-Centered Anderson-Evans Polyoxotungstate in Protein Crystallography. *Acc. Chem. Res.* **50**:1441.
[2] Molitor *et al.* (2016) Aurone synthase is a catechol oxidase with hydroxylase activity and provides insights into the mechanism of plant polyphenol oxidases. *Proc. Natl. Acad. Sci.* **113**:E1806.
[3] Molitor *et al.* (2016) *In situ* formation of the first proteinogenically functionalized $[TeW_6O_{24}O_2(Glu)]^{7-}$ structure reveals unprecedented chemical and geometrical features of the Anderson-type cluster. *Chem. Commun.* **52**:12286.
[4] Molitor *et al.* (2015) Crystallization and preliminary crystallographic analysis of latent, active and recombinantly expressed aurone synthase, a polyphenol oxidase, from *Coreopsis grandiflora*. *Acta Cryst. F* **71**:746.
[5] Bijelic *et al.* (2015) Hen Egg-White Lysozyme Crystallisation: Protein Stacking and Structure Stability Enhanced by a Tellurium(VI)-Centred Polyoxotungstate. *ChemBioChem* **16**:233.
[6] Mauracher *et al.* (2014) Latent and active *ab*PPO4 mushroom tyrosinase cocrystallized with hexatungstotellurate(VI) in a single crystal. *Acta Cryst. D* **70**:2301.
[7] Mauracher *et al.* (2014) Crystallization and preliminary X-ray crystallographic analysis of latent isoform PPO4 mushroom *(Agaricus bisporus)* tyrosinase. *Acta Cryst. F* **70**:263.