

**JBScreen XP Up**

Kit including JBScreen XP and TEW

Cat. No.	Amount
CS-351	1 Kit

For general laboratory use.**Shipping:** shipped at ambient temperature**Storage Conditions:** store at 8-10 °C**Shelf Life:** 12 months**Description:**

The additive Anderson-Evans polyoxotungstate (TEW) [TeW₆O₂₄]⁶⁻ has been shown to promote crystal contacts, improve crystal quality, and provide a valuable anomalous signal for phase determination due to its 6 tungsten atoms. It has successfully induced protein crystallization even at low concentrations of 1 mM. However, our own experiments have shown that a higher concentration of 5 or 10 mM TEW can significantly increase crystallizability even further.

The XP Up Screen offers 96 of the most common crystallization conditions that have been proven to be successfully improved with up to 10 mM TEW. To offer complete flexibility in terms of final concentration, TEW is provided in an additional tube and only needs to be added to the protein drop. The solutions are stable in the long term in the presence of up to 10 mM TEW, thus enabling maximum flexibility without compromise.

Content:

- 96 screening solutions x 1.7 ml each, optimized for high TEW concentrations, Cat.-No. CS-350
- 20 mg TEW [TeW₆O₂₄]⁶⁻, dissolve in 93 µl water to achieve a 100 mM stock solution, Cat.-No. X-TEW-20

The exact composition of each buffer is listed under the links "Screen Formulation".

All solutions are sterile filtered (0.2 µm), filled under sterile conditions and contain 0.1% ProClinTM 950 as preservative to prevent the growth of microbes. (ProClin is a trademark of LANXESS Corp.)

Related Products:

XP Screen, #CS-350

Anderson-Evans polyoxotungstate (TEW), #X-TEW-20

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] Sobala *et al.* (2020) Structure of human endo- α -1,2-mannosidase (MANEA), an antiviral host-glycosylation target. *PNAS* **117** (47):29595.

[3] Ames *et al.* (2020) Identifying a Molecular Mechanism That Imparts Species-Specific Toxicity to YoeB Toxins. *Front Microbiol* **11**:959.