

Supplementary Table Legends

Table S1. Peptides used for the identification of bovine rod outer segment proteins. Their sequences were shown in the single letter IUPAC nomenclature, their mass charge ratio (MCR), measured mass, charge, highest Mascot score, Mascot calculated mass, calibrated measured MCR, calibrated measured mass, delta score, and their left/right flanking amino acids. All peptides shown satisfy the set criteria for significance (see Methods).

Table S2. Proteins identified in the bovine rod outer segment preparations that satisfied the acceptance criteria (see Methods). Their IPI accession numbers, gene symbols, the number of peptides used for the identification and their sequences were given.

Table S3. Proteins identified in the bovine rod outer segment preparations sorted into seven categories according to their reported or suggested functions from the literature: Phototransduction, Metabolism, Vesicle Trafficking, Structural, Transport, House-keeping, and Unknown. The subcellular fractions in which they were detected are also indicated. R, Rod outer segment; M, Membrane fraction; S, Soluble fraction; D, Disk membrane fraction; P, Plasma membrane fraction.

Table S4. Absolute protein expression (APEX) measurement of bovine rod outer segment proteins. The APEX measurement of each protein is also expressed relative to the APEX measurement of the most abundant protein, Rhodopsin. Localization in rod outer segments (ROS) or cone outer segments (COS) is given for those which have been studied. Known contaminants are also indicated.

Table S5. Relative abundance of proteins in total rod outer segment membranes versus disk membranes by formaldehyde-labelling protein profiling. The ratio of each protein in total membrane/disk membrane was given along with its standard deviation in three separate preparations. “High” indicates that the protein was detected over 20-fold more in the total membranes, while “Low” indicates that the protein was detected over 20-fold more in the disk membranes.