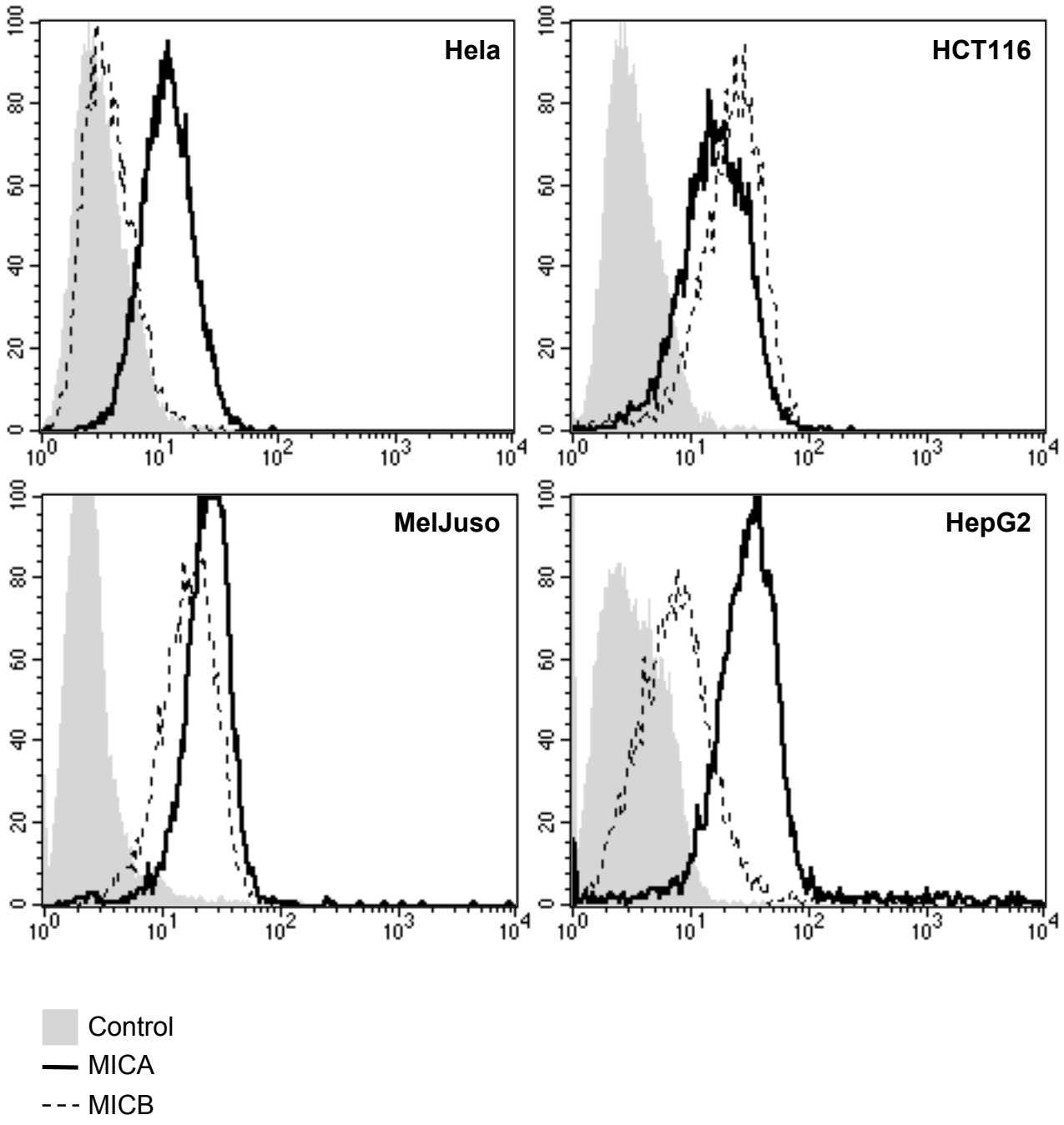
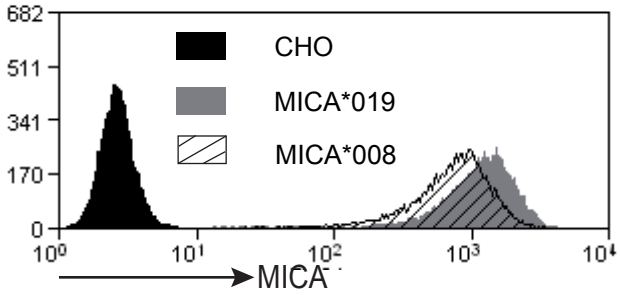
Supplementary Figure 1



Cells were detached from the tissue culture flask by incubation at 4°C in PBS 2% BSA, 5mM EDTA, washed and then stained with control (normal mouse serum), AMO1 (MICA specific) or BMO2 (MICB specific, both from BAMOMAB GmbH, München, Germany). After washing bound first antibody was visualised using FITC conjugated F(ab)2 goat anti-mouse Ig. Samples were analysed by flow cytometry using a FACSCan cytometer running Cellquest software (BD Biosciences).

Supplementary Figure 2

A.



B.

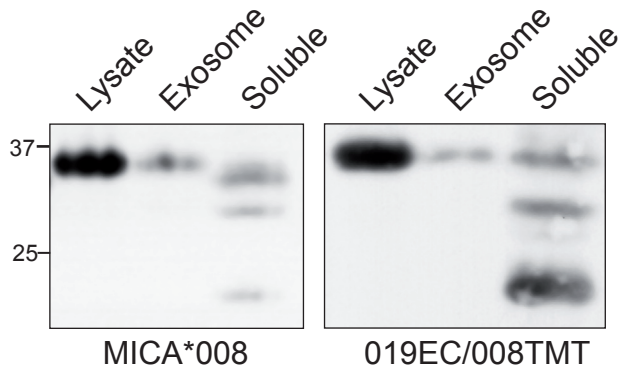
```
MICA*00801      PHSLRYNLTVLSWDGSVQSGFLAEVHLDGQPFLRYDRQKCRAKPQGQWAEDVLGNKTWDR 60
MICA*019        PHSLRYNLTVLSWDGSVQSGFLAEVHLDGQPFLRYDRQKCRAKPQGQWAEDVLGNKTWDR 60
                ************************************************************

MICA*00801      ETRDLTGNGKDLRMTLAHIKDQKEGLHSLQEIRVCEIHEDNSTRSSQHFYYDGELFLSQN 120
MICA*019        ETRDLTGNGKDLRMTLAHIKDQKEGLHSLQEIRVCEIHEDNSTRSSQHFYYDGELFLSQN 120
                ************************************************************

MICA*00801      LETEEWTVPQSSRAQTLAMNVRNFLKEDAMKTKTHYHAMHADCLQELRRYLESGVVLRRT 180
MICA*019        LETEEWTVPQSSRAQTLAMNVRNFLKEDAMKTKTHYHAMHADCLQELRRYLESSVVLRRT 180
                ************************************************.***********

MICA*00801      VPPMVNVTRSEASEGNITVTCRASSFYPRNIILTWRQDGVSLSHDTQQWGDVLPDGNGTY 240
MICA*019        VPPMVNVTRSEASEGNITVTCRASSFYPRNIILTWRQDGVSLSHDTQQWGDVLPDGNGTY 240
                ************************************************************

MICA*00801      QTWVATRICRGEEQRFTCYMEHSGNHSTHPVPSGKVLVLQSHWQTFHVSAVAAGCCYFCY 300
MICA*019        QTWVATRICRGEEQRFTCYMEHSGNHSTHPVPSGKVLVLQSHWQTFHVSAVAAAAAIFVI 300
                ************************************************... *

MICA*00801      YYFLCPLL-------------------------------------------------- 309
MICA*019        IIFYVRCCKKKTSAAEGPELVSLQVLDQHPVGTSDHRDATQLGFQPLMSALGSTGSTEGA 360
                  *
```

Supplementary Figure 2

A. FACS profiles of the CHO cell transfectants expressing MICA*019 and MICA*008 stained with the MICA/B specific mAb from R&D systems (mAb13001).

B. Alignment of the amino-acid sequences of the MICA*00801 and MIC*019 alleles used in these experiments. These alleles differ by one amino acid in the extracellular domain, that is distant from the site of interaction with NKG2D

Supplementary Figure 3



Supplementary Figure 3
The chimaeric MICA molecule 019EC/008TMT, like MICA*008, is released in exosomes. Exosomes and soluble proteins were isolated from cell free culture supernatants of CHO cells stably transfected with MICA*008 or 019EC/008TMT. The preparations of exosomes and soluble proteins were digested with PNGase F, separated on 12% SDS-PAGE and then analysed by western blot using a goat polyclonal antibody specific for MICA/B.

Supplementary Table 1

Treatment of CTL with MICA*008 containing exosomes provokes specific downregulation of cell surface NKG2D

	Medium	CHO exosomes	MICA*008 exosomes
NKG2D	21.55[a]	20.78	16.91
CD3	132.95	136.31	129.15
CD8	98.12	95.65	94.71

[a] GeoMFI after indicated treatment