```
Human     MAQPYPPAQYPPPPQNGIPAEYAPPPPHPTQDYSGQTPVPTEHGMTLYTPAQTHPEQPGS   60
Rat       MAQPYPPAQYPPPPQNGIPAEYAPPPPHPTQDYSGQTPVPPEHGMTLYTPAQTHPEQPGT   60
Mouse     MAQPYPPAQYPPPPQNGIPAEYAPPPPHPTQDYSGQTPVPPEHGMTLYTPAQTHPEQPGT   60
Dog       MAQPYPPAQYPPPPQNGIPAEYAPPPPHPTQDYSGQTPVPPEHGMTLYTPAQTHPEQPGS   60
Cow       MAQPYPPAQYPPPPQNGIPAEYAPPPPHPTPDYSGQTPVPPEHGMTLYTPAQTHPEQPSS   60
Sheep     MAQPYPPAQYPPPPQNGIPAEYAPPPPHPTPDYSGQTPVPPEHGMTLYTPAQTHPEQPSS   60
Chicken   MAQPYPPAQYPPPPQNGIPAEYAPPHPHPTQDYSGQSTV-PEHAMTLYTPAQSHAEQPGS   59
          ************************ **** *****: *  **.*********:* ***.:
             <-----MCA-1B7------>
             <---Millipore-A60-->

Human     EASTQPIAGTQTVPQTDEAAQTDSQPLHPSDPTEKQQPKRLHVSNIPFRFRDPDLRQMFG  120
Rat       EASTQPIAGTQTVPQADEAAQTDSQQLHPSDPTEKQQPKRLHVSNIPFRFRDPDLRQMFG  120
Mouse     EASTQPIAGTQTVPQADEAAQTDNQQLHPSDPTEKQQPKRLHVSNIPFRFRDPDLRQMFG  120
Dog       EASTQPIAGAQTVPT-DEAAQTDSQPLHPSDPTEKQQPKRLHVSNIPFRFRDPDLRQMFG  119
Cow       DTSTQPITGAQTVPQTDEAAQTDSQPLHPSDPTEKQQPKRLHVSNIPFRFRDPDLRQMFG  120
Sheep     DTSPQPITGAQTVPQTDEAAQTDSQPLHPSDPTEKQQPKRLHVSNIPFRFRDPDLRQMFG  120
Chicken   DASTQSIAGTQTVPQTDEAAQTDSQQLHSSDNTDKQQPKRLHVSNIPFRFRDPDLRQMFG  119
          ::* * *:*:**** ****** * ** ** *:*************************
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Human     QFGKILDVEIIFNERGSKGFGFVTFETSSDADRAREKLNGTIVEGRKIEVNNATARVMTN  180
Rat       QFGKILDVEIIFNERGSKGFGFVTFETSSDADRAREKLNGTIVEGRKIEVNNATARVMTN  180
Mouse     QFGKILDVEIIFNERGSKGFGFVTFETSSDADRAREKLNGTIVEGRKIEVNNATARVMTN  180
Dog       QFGKILDVEIIFNERGSKGFGFVTFETSSDADRAREKLNGTIVEGRKIEVNNATARVMTN  179
Cow       QFGKILDVEIIFNERGSKGFGFVTFETSSDADRAREKLNGTIVEGRKIEVNNATARVMTN  180
Sheep     QFGKILDVEIIFNERGSKGFGFVTFETSSDADRAREKLNGTIVEGRKIEVNNATARVMTN  180
Chicken   QFGKILDVEIIFNERGSKGFGFVTFETSTDADRAREKLNGTIVEGRKIEVNNATARVMTN  179
          ****************************:*******************************
          ---------------RRM----------------------------->

Human     KKTGNPYTNGWKLNPVVGAVYGPEFYAVTGFPYPTTGTAVAYRGAHLRGRGRAVYNTFRA  240
Rat       KKPGNPYANGWKLNPVVGAVYGPEFYAVTSFPYPTTGTAVAYRGAHLRGRGRAVYNTFRA  240
Mouse     KKPGNPYANGWKLNPVVGTVYGPEFYAVTSFPYPTTGTAVAYRGAHLRGRGRAVYNTFRA  240
Dog       KKTANPYSNGWKLNPVVGAVYGPEFYAVTGFPYPTTGTAVAYRGAHLRGRGRAVYNTFRA  239
Cow       KKTANPYTNGWKLNPVVGAVYGPEFYAVTGFPYPTTGTAVAYRGAHLRGRGRAVYNTFRA  240
Sheep     KKTANPYTNGWKLNPVVGAVYGPEFYAVTGFPYPTTGTAVAYRGAHLRGRGRAVYNTFRA  240
Chicken   KKTANPYTNGWKLNPVVGAVYGPEFYAVTGFPYPATGTAVAYRGAHLRGRGRAVYNTFRA  239
          **  .***:**********:********* ****:*********************

Human     APPPPPIPTYGAVVYQDGFYGAEIYGGYAAYRYAQPAAA--AAAYSDSYGRVYAAADPYH  298
Rat       APPPPPIPTYGAVVYQDGFYGAEIYGGYAAYRYAQPAAAAAAAYSDSYGRVYAAADPYH  300
Mouse     APPPPPIPTYGAVVYQDGFYGAEIYGGYAAYRYAQPAAA-TAAAYSDSYGRVYAAADPYH  299
Dog       APPPPPIPTYGAVVYQDGFYGAEIYGGYAAYRYAQPAAA--AAAYSDSYGRVYAAADPYH  297
Cow       APPPPPIPTYGAVVYQDGFYGAEIYGGYAAYRYAQPAAA--AAAYSDSYGRVYAAADPYH  298
Sheep     APPPPPIPTYGAVVYQDGFYGAEIYGGYAAYRYAQPAAA--AAAYSDSYGRVYAAADPYH  298
Chicken   APPPPPIPTYGAVVYQDGFYGAEIYGGYAAYRYAQPAAA--AAAYSDSYGRVYAAADPYH  297
          *****************************************  *****************

Human     HTIGPAATYSIGTM    312
Rat       HTIGPTATYSIGTM    314
Mouse     HTIGPTATYSIGTM    313
Dog       HTIGPAATYSIGTM    311
Cow       HTIGPAATYSIGTM    312
Sheep     HTIGPAATYSIGTM    312
Chicken   HTIGPAATYSIGTM    311
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Alignment of FOX3 sequences from several species.

The FOX3 protein contains a central RNA recognition motifs (RRM, highlighted in green) at the indicated position which is identical in all species above and also almost identical in the related FOX1 and FOX2 proteins. The EnCor MCA-1B7 antibody was raised against a recombinant construct of the first 99 amino acids of human FOX3, and the epitope for this antibody is as shown above in yellow, mapping close to the N-terminal of the molecule, a proline rich region of low sequence complexity. We found that the original NeuN antibody, Millipore A60, binds to the same peptide, confirming data presented by others. Kinetic studies show that our antibody has a Kd of 2.69 X 10-9, significanlty better than that of A60 which we measures at 7.95 X 10-9. Interestingly two other mouse FOX3 monoclonals we have made also bound this protein. A BLAST search shows the peptide is 100% conserved in hundreds of mammalian and avian sequences, so that this antibody should be of general utility. We have obtained positive results with human, rat, mouse, cow, pig, dog and horse material.